

The period from 1969 through the early 1980s was pivotal for the nation as science revealed significant public health issues created by poor land use practices. Many important environmental laws were enacted during this time.

Photo: Wildlife researcher Jerry Bartelt conducts Canada goose telemetry studies at Horicon Marsh and surrounding state wildlife areas in the late 1970s.

The federal Endangered Species Preservation Act, which gave protection to native animal species, was amended in 1969 to provide protection of animals in danger of worldwide extinction by banning their importation into the United States. In 1970, Wisconsin became the first state to ban DDT, followed by a federal ban in 1972, with exceptions for public health and quarantine uses and export of DDT to other countries. Senator Gaylord Nelson founded Earth Day on April 22, 1970. This single act stirred a worldwide interest of environmental activism and created an annual tradition that would have a powerful impact on the protection of the nation's natural resources. Following the establishment of the U.S. Environmental Protection Agency (EPA) in 1970, the decade saw the passage of major federal environmental laws, including the Clean Air Act (1970), the Clean Water Act (1972), the Safe Drinking Water Act (1974), and the Toxic Substances Control Act (1976), which enabled the EPA to regulate toxic chemicals. Wisconsin enacted its own endangered and threatened species protection law in 1972 and was the first state to apply for a cooperative agreement with the U.S. Fish and Wildlife Service. In 1973, the federal government broadened the 1962 endangered species conservation laws by creating the Endangered Species Act, which distinguished threatened from endangered species; allowed listing of a species in danger in just part of its range; allowed listing of plants and invertebrates; authorized unlimited funds for species protection; and made it unlawful to kill, harm, or otherwise "take" a listed species. The Wisconsin law was expanded in 1978 to also include endangered and threatened plants. In 1983, the Wisconsin State Legislature passed a tax check-off law to fund Wisconsin's endangered resources program. The Wisconsin Supreme Court reaffirmed the Public Trust Doctrine in *Just v. Marinette* in 1972. This doctrine was part of the Northwest Ordinance of 1787 and had been incorporated into the Wisconsin Constitution. The effect of this important standard was that all waterways of the state were "common highways and forever free." It became the foundation of the state's wetland and shoreland laws. The Wisconsin Supreme Court upheld a decision by the Marinette County Circuit Court that the county shoreland zoning ordinance was not valid when Donald Just destroyed wetland with fill material. Terry Linterman had the county ordinance "tested" by the court's decision. Environmental was created in 1973 and tax laws to ensure were completed on the environment. A law was passed in 1973 that was signed by the governor. A program became the Wisconsin Elimination System along with a new requirement. A pollution program was created in 1977 to address runoff pollution. The success of Wisconsin's Conservation Corps in training young men and girls in conservation project work stimulated the federal government to establish its own Youth Conservation Corps in 1975, funding with \$60 million annually. Wisconsin law created a state waterfowl hunting stamp in 1978. The new segregated funds generated millions of dollars during the years following and provided critical revenue for protecting and developing state wetlands. The law also created one-third of the revenue generated to develop propagation areas in Conservation Corps. In 1979, the Wisconsin DNR passed rules on the use and application of pesticides that produced control. The standards were established for training applicators, and pesticide registration became mandatory. The technical training required for agency staff increased as more regulations were generated over the next decade, increasing over the next decade. A non-lapsable trust fund. Prior to that, unappropriated surpluses that were not segregated (like the Fish and Wildlife Account) could lapse into the General Fund and be used for whatever the legislature and governor chooses. Now those funds had to be used for specific purposes. DNR passed the new Department of Natural Resources (DNR) some time to establish how to administer complex and costly ongoing programs. The Natural Resources Board had to organize its staff members to address both traditional conservation matters and new environmental laws governing land and water pollution. Department secretary L.P. Voigt had to seek employee anger over reorganization and created a support structure in the central offices and in field offices. This period eventually became a great one for Wisconsin's natural resources and its federal partners. The state was passing the way, funding was good as was public support of the agency. Numerous new programs evolved in addition to significant conservation accomplishments for state employees working in the traditional fish, game, forestry, parks, and education programs. Administration. The central office central center was restructured into four major divisions after the agency was reorganized in 1963: Environmental Protection, Forestry, Wildlife and Recreation, and Tourism and Information and Services. Central in the field evolved into six districts: Southern, Southeast, West Central, Northwest, North Central, and Lake Michigan. The initial staff restructuring in 1963 also resulted in the creation of districts to lead each district. Their respective programs were fish, game, and enforcement, forestry and parks, and the new



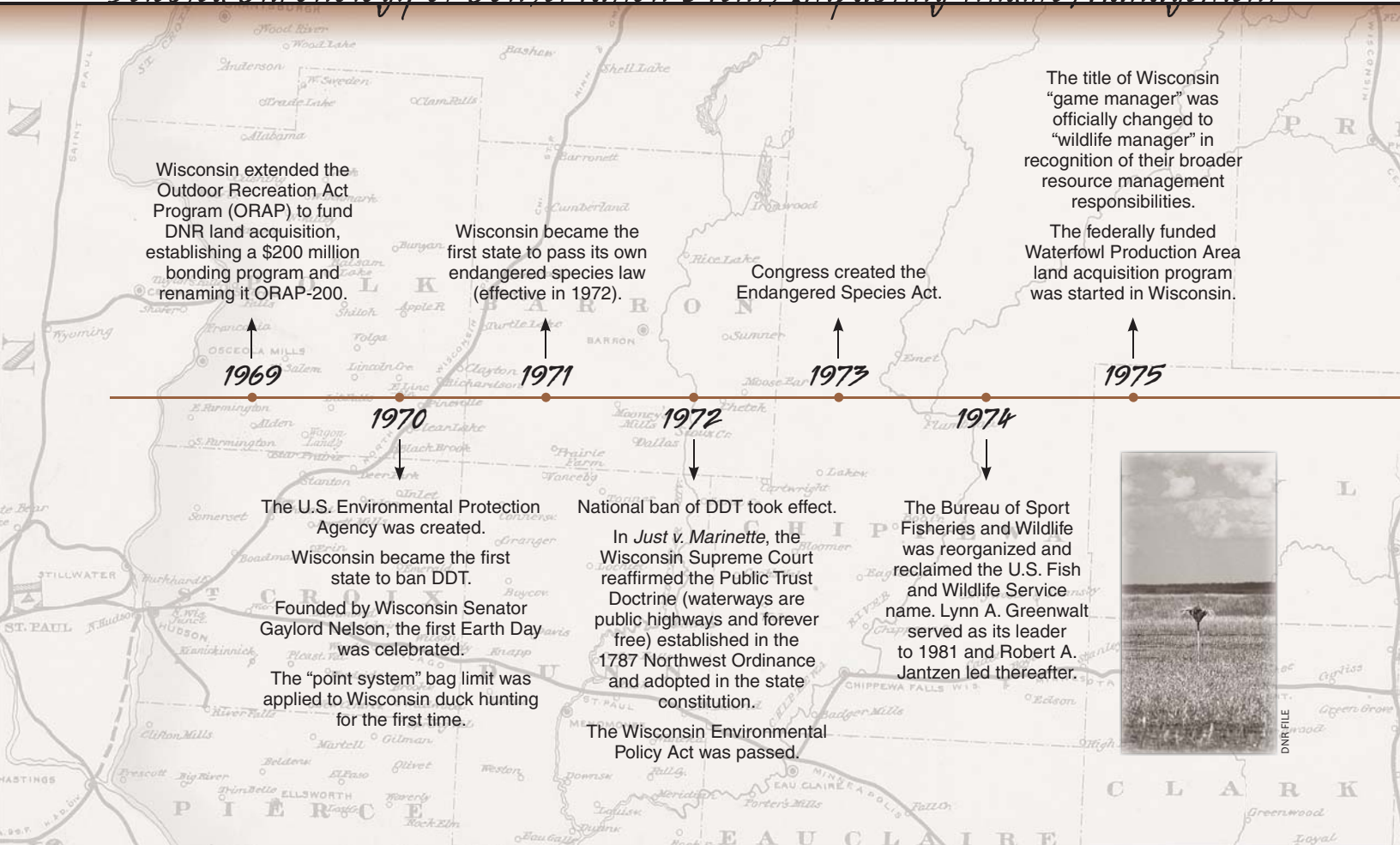
and Kathryn Just on their property. Game manager assisted in drafting nance and gave leading up to the The Wisconsin Pollutants Act (WESA) to complement the appropriate state projects impacting Wisconsin. Senate also created the wastewater permit law in 1975. When Pollutant Discharge was created, power plant and nonpoint source

Chapter 6

A Change of Focus, 1969-1984

Chapter 6 covers the period from 1969 to 1984, a time of significant change in Wisconsin's natural resources management. The focus shifted from traditional conservation to a more comprehensive approach that included environmental protection, forestry, wildlife, and recreation. The Wisconsin Department of Natural Resources (DNR) was reorganized in 1963, and the central office was restructured into four major divisions: Environmental Protection, Forestry, Wildlife and Recreation, and Tourism and Information and Services. The field evolved into six districts: Southern, Southeast, West Central, Northwest, North Central, and Lake Michigan. The initial staff restructuring in 1963 also resulted in the creation of districts to lead each district. Their respective programs were fish, game, and enforcement, forestry and parks, and the new

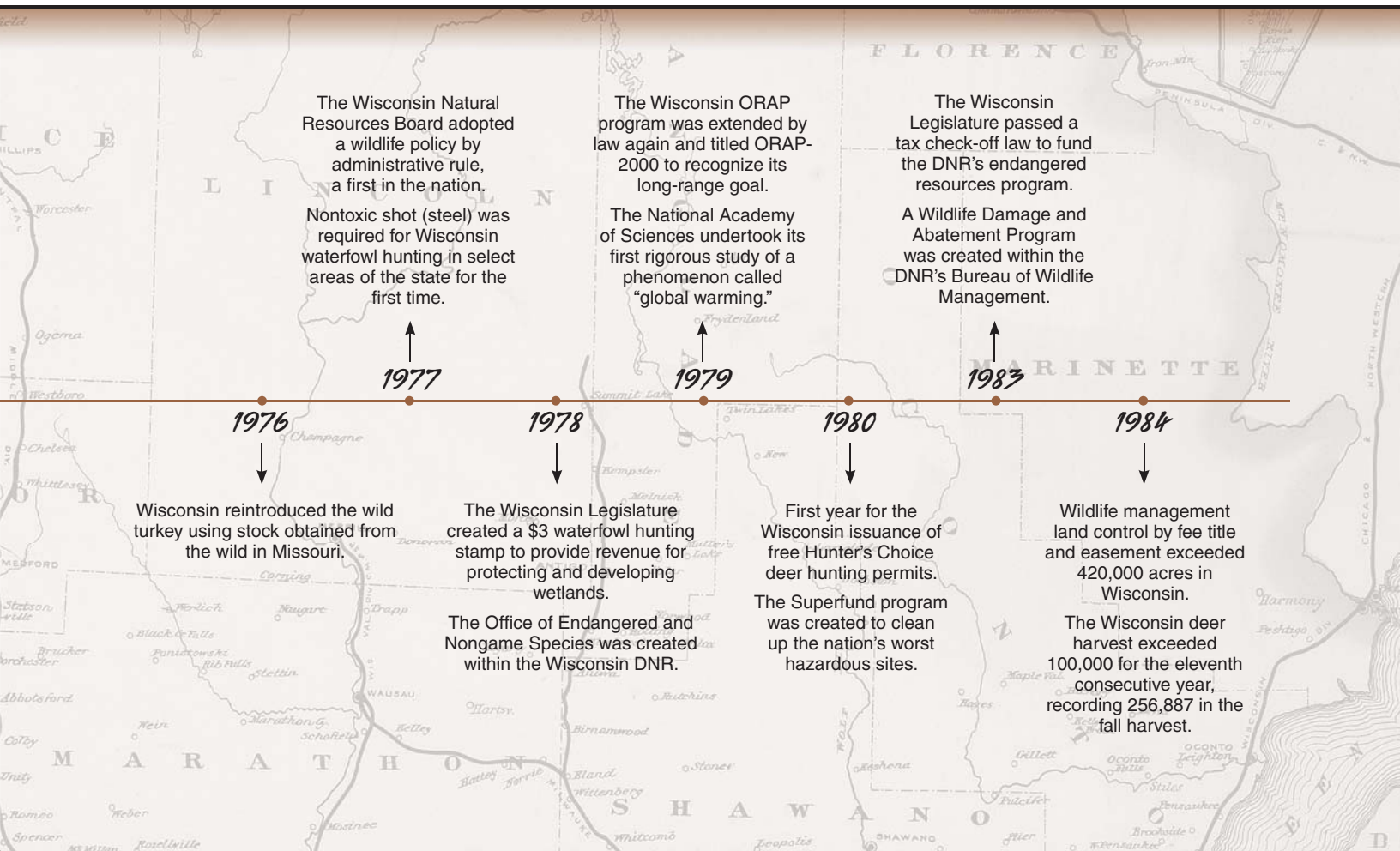
Selected Chronology of Conservation Events Impacting Wildlife Management



Historical Overview



- Neil Armstrong walked on the moon on July 20, 1969. The next decade brought about technical advances that would forever change the world and the environment.
- Richard Nixon was reelected president by a near record landslide in 1972, and Spiro T. Agnew became vice president. Democrats won a majority in both houses of Congress. The Watergate scandal led to Nixon's resignation in 1974, and Gerald Ford became president.
- Jimmy Carter (James Earl Carter, Jr.) was elected as the 39th president of the United States in 1976, narrowly defeating Gerald Ford. Senator Walter F. Mondale was elected vice president.
- By the late 1970s, computers began appearing in the workplace.
- By 1980, Wisconsin's population was 4,705,642, and the U.S. population had exceeded 227 million. Former Hollywood actor Ronald Reagan was elected president in 1980, replacing Jimmy Carter.
- On August 3, 1981, 12,000 members of the Professional Air Traffic Controllers Organization walked off the job, setting off a chain of events that would redefine labor relations.



in America. President Reagan warned them of the no-strike federal law violation and gave them 48 hours to return to work. They didn't and were all terminated and banned from federal employment.

- President Reagan selected James G. Watts to serve as his first U.S. secretary of the interior. Watts created controversy throughout his tenure from 1981 to 1983 because of his hostility to environmentalism and support of the development and use of federal lands by forestry, ranching, and other commercial interests.
- In Wisconsin, Warren P. Knowles served as governor through 1971, when Patrick Lucey replaced him. Lieutenant Governor Marten Schreiber replaced Lucey in 1977, when the governor resigned to become the ambassador to Mexico. Lee Sherman Dreyfus was elected governor in 1979 and served until Tony Earl was elected in 1983.



The Gamekeepers



S. GILCHRIST

Endangered species

A species in danger of extinction in all or a significant portion of its range. Federal and state laws provide protection for endangered species. See also threatened species.

Threatened species

A species likely to become endangered in the near future. Federal and state laws provide protection for threatened species. See also endangered species.

Nonpoint source pollution

Polluted runoff from farm fields and urban areas that doesn't emanate from a wastewater discharge pipe.

The period from 1969 through the early 1980s was pivotal for the nation as science revealed significant public health issues created by poor land use practices. Many important environmental laws were enacted during this time. The federal Endangered Species Preservation Act, which gave protection to native animal species, was amended in 1969 to provide protection of animals in danger of worldwide extinction by banning their importation into the United States. In 1970, Wisconsin became the first state to ban DDT, followed by a federal ban in 1972, with exceptions for public health and quarantine uses and export of DDT to other countries.

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Wisconsin enacted its own *endangered* and *threatened species* protection law in 1972 and was the first state to apply for a cooperative agreement with the U.S. Fish and Wildlife Service. In 1973, the federal government broadened the 1969 endangered species conservation laws by creating the Endangered Species Act, which:

- distinguished threatened from endangered species;
- allowed listing of a species in danger in just part of its range;
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The Wisconsin Environmental Policy Act (WEPA) was created in 1973 to complement federal law and ensure appropriate studies were completed on projects impacting the environment. A Wisconsin Sewage Commission was also created that

same year. A wastewater permit program became law in 1975 when the Wisconsin Pollutant Discharge Elimination System was created, along with a new power plant siting requirement. A *nonpoint source pollution* program was created in 1977 to address runoff pollution.

The success of Wisconsin's Conservation Corps in training young boys and girls in conservation project work stimulated the federal government to establish its own Youth Conservation Corps in 1974, funded with \$60 million annually.

Wisconsin law created a \$3 state waterfowl hunting stamp in 1978. The new segregated funds generated millions of dollars during the years following and provided critical revenue for protecting and developing state wetlands. The law earmarked one-third of the revenue generated to develop propagation areas in Canada by nonprofit organizations.

The Wisconsin endangered species law was expanded in 1978 to also include endangered and threatened plants. In 1983, the Wisconsin State Legislature passed a tax check-off law to fund Wisconsin's endangered resources program.

In 1979, the Wisconsin DNR passed rules on the use and application of pesticides that produced controversy in the farm community. Standards were established for training applicators, and pesticide registration became mandatory. The technical training required for agency field staff increased as more regulations were generated over the next decade, increasing overhead expenses and slowing field operations.

Also in 1979, the Conservation Fund was established as a non-lapsable trust fund. Prior to that, unappropriated surpluses that were not segregated (like the Fish and Wildlife Account) could lapse into the General Fund and be used for whatever purpose the Legislature and governor chooses. Now those funds had more protection and required specific legislation to divert their use for other purposes.

DNR Progress

The new Department of Natural Resources (DNR) took some time to establish how to administer complex and newly emerging programs. The Natural Resources Board had to organize its seven members to address both traditional conservation matters and new environmental laws governing land and water pollution. Department secretary L.P. Voigt had to soothe employee anger over reorganization and created a supportive bureaucracy in the central office as well in field offices.

This period eventually became a great one for Wisconsin natural resources and its recreationalists. With some bumps along the way, funding was good as was public support of the agency. Numerous new programs evolved in addition to significant conservation accomplishments for state employees working in the traditional fish, game, forestry, parks, and enforcement programs.

Administration

The central office control center was restructured into four major divisions after the agency was reorganized in 1967:

- Environmental Protection
- Forestry, Wildlife and Recreation
- Tourism and Information
- Services

Control in the field evolved out of six districts: Southern, Southeast, West Central, Northwest, North Central, and Lake Michigan. The initial staff restructuring in 1967 also resulted in three directors appointed to lead each district. Their respective programs were fish, game, and enforcement; forestry and parks; and the new environmental protection program. Area supervisor positions (later called area directors) were created in 1969 to coordinate all functions in each of 17 administrative areas within the six districts. Finally, in 1971, one district director was put in charge of all operations and designated "secretary's representative" (the "final decider"), and an assistant district director position was created in all but the Southeast District.

The Legislative Audit Bureau initiated the practice of conducting state agency audits on a regular basis in 1968. The DNR was audited almost every year through the 1970s and 1980s with specific programs examined in more detail when requested or when the department-wide audit indicated a closer analysis of a topic was warranted.

Wisconsin's Conservation Fund

The Conservation Fund was primarily supported by revenue generated by sales of hunting and fishing licenses, stamps, permits, timber sales, and handling fees. Tribal Gaming fees added \$2.5 million annually to the fund in 1999-00 and increased to \$3 million annually in 2003-04. Nine separate accounts are segregated within the fund:

1. Fish and Wildlife
2. Forestry
3. Parks
4. Water Resources
5. Natural Resources magazine
6. Boat Registration
7. All-terrain Vehicle
8. Snowmobile
9. Endangered Resources

DNR programs receiving funding from this source include fish and wildlife, forestry, state parks, endangered resources, research, and several recreational vehicle programs. It also supports other agencies including the Lower Wisconsin State Riverway Board, Fox River Navigational System Authority, Kickapoo Reserve Management Board, the University of Wisconsin System, the Wisconsin Historical Society, Wisconsin Department of Commerce, and the Wisconsin Department of Agriculture, Trade and Consumer Protection.

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Line-staff organization

An organization operating on a system that enables supervisors (line officers) to direct subordinates (staff) to accomplish work activities.

Personnel who provide services to line personnel to accomplish work are also categorized as "staff."

DNR's line channel for field wildlife biologists flows from the secretary to regional directors to land leaders to regional wildlife supervisors to area wildlife biologists to field wildlife biologists.

The chain-of-command in the new *line-staff organization* technically flowed from the DNR secretary to district directors, then to area supervisors and, finally, to area level workers. However, the secretary delegated most day-to-day program authority to division administrators who, in turn, delegated significant authority to bureau directors.

The new DNR completed its first full biennium on June 30, 1971, having accomplished the final segments of its major reorganization:

- The Division of Forestry and Recreation was combined with the Division of Fish, Game, and Enforcement to form a new Division of Forestry, Wildlife, and Recreation.
- The Bureau of Environmental Impact was created and attached directly to the secretary's office.
- The Bureau of Commercial Recreation within the Department of Local affairs and Development was transferred to the DNR.
- Six DNR field districts were created using the boundaries from other state administrative districts.
- A single district director was placed in charge of each district and reported directly to the office of the secretary.
- Seventeen area offices were designated within the six districts, each under the control of an area supervisor who reported directly to the district director.

Budget

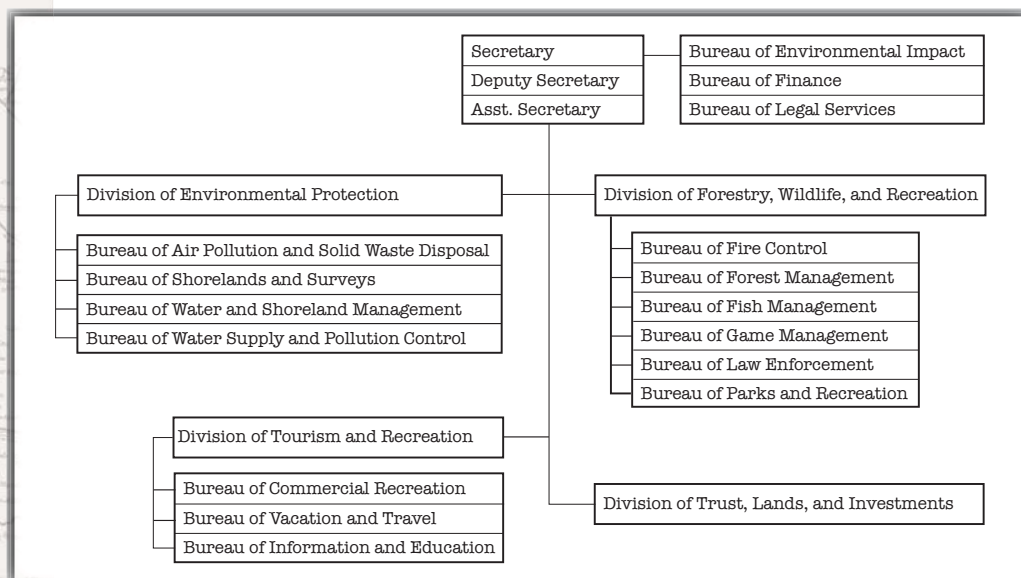
The department started off Fiscal Year 1969 with more money and more people than ever before. The total budget was \$58 million, and 1,484.8 positions were authorized. Not everything, however, was rosy continuously in the field of conservation. The early 1970s found certain state revenues tight again. The DNR's law enforcement program was understaffed and was unsuccessful in obtaining more positions through the budget process or a special request to the Board of Government Operations.

Governor Lucey imposed a moratorium on the total number of state employees and froze salaries for the biennium on October 9, 1972. Seemingly without recourse, the DNR enforcement program sought hiring increases independent from the agency.

A license fee increase needed for the 1973–75 biennium caused a great deal of public controversy as new environmental programs drew a disproportionate share of the agency's budget. Northern resort communities in particular objected to shortages in fish and game programs. The increase was eventually approved, but the agency's public relations suffered.

By 1984, the budget more than tripled to \$190 million, and 2,493.83 positions were on the payroll.

Wisconsin Department of Natural Resources Organization Chart, 1971-1972.



Warden Conflict

Conservation wardens statewide were quite upset with the DNR reorganization under the 1967 Kellett Commission Reorganization Act. Their key objection was the lack of line control of the field force by the chief warden and the absence of law enforcement experience by administrators (district directors and area supervisors) now supervising field wardens. Since the agency leadership was not responsive to requests for special treatment, conservation wardens through their union representatives decided to create a separate law enforcement division with their own supervisory channels. Specifically, district directors and area supervisors would not have supervisory authority over conservation wardens.

At the request of the warden union, Wisconsin State Representative Anthony S. Earl drafted Bill 87A to create a separate Division of Enforcement in January 1973 and to create direct line authority over its personnel. Field wardens received instructions from their union representative to lobby strongly for bill support in their communities as well as with their legislative representatives. Department administrators were incensed over this development.

The action by law enforcement not only reflected poorly on agency procedures but also created a cantankerous division among agency personnel. Opposition to Bill 87A was immediately drafted by the administration and presented to the Natural Resources Board. The board endorsed opposing the bill and presented its position at the legislative hearing on January 1, 1973. Their testimony noted that the bill was inconsistent with the intent of the Kellett Commission reorganization and that it would reduce service to the public.

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An article entitled "DNR Not a Big, Happy Family" appeared in the *Milwaukee Journal* on February 11, 1973, as a result of legislative hearing actions and various interviews by outdoor writer Jay Reed. While the article attempted to encapsulate issues and positions of both sides, numerous misleading statements and outright errors generated a strong editorial by the Natural Resources Board chair, Bud Jordahl. His response addressed inaccuracies of Reed's article and defended the reorganized DNR.

Bill 87A was ultimately defeated in committee and never reached the legislative floor. Warden morale suffered for some time, and it took years before their coworkers forgot about this controversy that seemed to make people who were not wardens second-class citizens in the conservation family. A general hunting, trapping, and fishing license increase obtained by the department in 1973 was the first the DNR received since 1962 and finally allowed hiring additional wardens.

Change in Leadership

While Voigt was a department icon for 20 years, the longest serving of any director, word circulated that Governor Lucey wanted his own man in charge. Several investigative reporting articles by the *Milwaukee Sentinel* materialized in 1974 under the title "DNR: Resources Rip Off." The series questioned DNR land acquisition practices, unwarranted road building, and timber salvaging and alleged mismanagement, waste, bungling, weak enforcement, and favoritism.

Natural Resources Board chair Bud Jordahl recommended a full investigation of the *Sentinel* charges soon after the first article appeared, but nothing was done until Governor Lucey took action a few weeks later. Lucey initiated an executive order appointing James B. MacDonald, a University of Wisconsin Law School professor, as a

Important Conservation Leaders Pass Away

Wisconsin lost several important conservation leaders during this period. Known for his tedious recording of 35 notebooks on early Wisconsin wildlife and numerous papers on birds and mammals, **Arlie William Schorger** died on May 26, 1972. A very successful chemist, inventor, and businessman, he turned his ornithological hobby into a late-in-life career as a professor of wildlife management at the University of Wisconsin in Madison from 1951 to 1971. Schorger also wrote two nationally significant books, *The Passenger Pigeon: Its History and Extinction* (1955) and *The Wild Turkey: Its History and Domestication* (1966).

John Beale, who had been the chief forester since 1954, had advanced to serve in various administrative positions prior to and after the 1967 agency reorganization. Just after his latest promotion to deputy secretary, he died suddenly from a heart attack on May 27, 1976. His widow maintained that unusual agency stress caused his demise and later sued the state. She was successful and obtained a substantial court settlement.

Harley W. MacKenzie died on September 27, 1979, at 91 years of age. He was a rugged field warden who established a solid reputation as a spirited conservationist early in his career. He became chief warden in 1925 and WCD director in 1934, serving through 1942. MacKenzie was instrumental in moving the state game farm from remote Door County to Poynette in 1934. He had a heavy hand in the game management program through furbearer policy, game farm operations, hunting regulation development, and personnel hiring influences. The educational facility adjoining the State Game Farm was dedicated in his name on October 1, 1972.

John Berkahn, longtime manager of the Mead Wildlife Area, died on January 20, 1981, at the age of 49. He had started with the WCD in 1955 studying grouse and was a conservation aid at Powell Marsh in Vilas County before being promoted as a game manager in 1957. Placed in charge of developing Mead in 1959, his wetlands management expertise turned the marginal cropland and bottomland of the Little Eau Pleine River into a Mecca for waterfowl.

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special investigator. MacDonald worked with a citizen panel and his own investigators to examine the published incidents and report on the facts. File and interview results corroborated the *Sentinel* reports and identified four agency problems:

1. Inadequate communications
2. Failure to seek proper legal council
3. Slow and inconsistent regulation enforcement
4. Poor availability and utilization of information

With Secretary Voigt discredited, all that remained to get rid of him was the vote of the Natural Resources Board. That was facilitated the following year when Lucey appointees finally dominated on the board. The formal decision to replace Voigt was made at their regular meeting in Madison on May 22, 1975.

At Jordahl's insistence, the board hired a consultant to search nationally for Voigt's replacement, and a potential list of about 15 people was drafted over the next five months. Before the list of candidates was presented, board member Larry Dahl expressed impatience with the bureaucratic procedure and nominated Tony Earl for the position. His motion was seconded, and a vote was taken. All of a sudden, on October 23, 1975, Tony Earl became the new DNR secretary.

Earl had an excellent background, having served as the Marathon County assistant district attorney, Wausau city attorney, Department of Administration secretary, legislator, and Assembly majority floor leader. While he was a former DNR critic, he clearly was a dynamic leader who possessed the right political mind-set to get along with the governor and the board. He was very articulate, extremely personable, and projected the type of positive image DNR seemed to need at this time in its history.

Governor Lucey also established an unprecedented power shift that increased the number of top DNR positions that were "unclassified," that is, not protected by the civil service system. The positions included the deputy secretary, executive assistant, and all division administrators. This meant those jobs were appointed at the whim of the DNR secretary, rather than through competitive examinations. Such appointments were required to be passed through the governor's office for approval. Since the secretary served at the discretion of the Natural Resources Board, and they, in turn, were appointed by the governor, there could be no doubt that politics now had heavy influence over this state agency. *(Author's note: This politicizing of the agency was believed to have far-reaching impact because it enabled leadership to appoint whomever they wanted to influential agency positions. This procedure remains in affect today.)*

In the eyes of many, this political change started a trend of appointing outside political appointees to various leadership positions in the DNR. Not only did these appointments stifle career paths for natural resource professionals but the appointments also brought outsiders into leadership positions without experience or specific knowledge in natural resources management. Since few outside of the department knew of this new policy or its impact, public concern never materialized, and it became a permanent fixture for controlling DNR leadership appointments.

Earl Popularity

Despite being from outside the agency and an obvious political appointee, Tony Earl was quickly embraced by department employees. One of his first priorities was getting to know his personnel in the central office and in the field. Numerous talks and tours followed, and Earl's warm personality, speaking skills, and uncanny ability to remember names soon had everyone very upbeat about Earl and their DNR job commitments.

The public view of the DNR had not been very good toward the end of Voigt's regime, and the press was having a good time bashing the agency. It became popular to say the initials DNR meant "Damn Near Russia" or "Do Nothing Right." The new environmental enforcement was viewed as too heavy handed by the business community. Earl placed a high priority on addressing this problem along with bolstering the morale of his employees. Again, he embarked on a very aggressive campaign to talk to business leaders, community leaders, and numerous organizations around the state, touting the positive accomplishments of the DNR.



Tony Earl was very personable and well liked by DNR personnel.

A Change of Focus, 1969-1984

Earl was a very entertaining public speaker. His opening line “I’m from the DNR and I’m here to help you” was memorable in his speeches. While the words were intended to create a helping agency image, the humor worked even better with the public and soon was a popular slogan that eased tensions. Later, Earl added to the public relations cause by distributing thousands of buttons exclaiming “I’m from the DNR and damn proud of it.”

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During Earl’s tenure, a legislative attempt to change the DNR secretary position to serve on the governor’s cabinet (rather than serving at the pleasure of the Natural Resources Board) was tried and failed—somewhat ironic in that Earl had supported such a move when he was in the Legislature but opposed it as the DNR secretary. The concept would surface repeatedly over the next 25 years.

Legal Services

As the agency grew in size and complexity, so did its staff of attorneys. Emil Kominski retired in 1972 after more than 20 years as chief legal council and was replaced by James Kurtz who had advanced from a *limited term employee (LTE)* position to permanent staff in 1968. In 1973, attorneys Charles Leveque and Richard Prosis joined the staff followed by Jim Christenson in January 1974. New environmental laws were a catalyst for hiring ten more attorneys by 1984.

Land Control

The department’s land acquisition program continued to thrive under the Outdoor Recreational Act Program (ORAP) funding. ORAP 200 became ORAP 2000 in 1979 under a Task Force led by former governor Warren Knowles. State bond sales became the funding source, and the new law extended ORAP for another ten years. State ownership on 581 properties exceeded 1,000,000 acres by 1984.

Forestry

The use of a fire simulator to train personnel in forest fire organization and control increased in 1971. Four fire control headquarters were designated as training stations for new forestry employees. Within the new Forestry, Wildlife, and Recreation Division, the former Forest Protection Section title changed to Fire Control Bureau for a few years before it was incorporated into the Forest Management Bureau in 1973.

The first three John Deer JD 450 bulldozers were purchased from Michigan’s DNR in 1973 to start the modernization of the fleet. Each had a dozer blade and mounted rear plow. Fire protection districts now encompassed 16,797,920 acres with almost 15 million of those acres in cooperative forest fire protection coverage (local fire department cooperation). For the first time in history, Wisconsin sent two 20-man crews to Boise, Idaho, to fight forest fires in 1973.

Twelve major fires burned more than 43,000 acres in 1977, but only 1,662 acres burned the next year, the lowest on record since 1905. The state lost its first employee in a fire in 1982 when a fire overran a man constructing a fire line in Eau Claire County. Mandatory physical fitness testing was required of all protective occupation employees that same year, and 177 forest rangers, wardens, park rangers, and forest fire assistants were tested at seven sites around the state. Annual testing started June 1983.

Smoky the Bear celebrated his 40th anniversary at events in Wisconsin and across the nation in 1984. The U.S. Post Office issued a \$0.20 stamp in his honor.

Parks and Recreation

The State Parks program had changed its title to the Parks and Recreation Bureau in 1968. An Ice Age National Scientific Reserve was added to state parks administration in 1971, and four units of the Reserve were created over the next three years. A campsite

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Limited term employee (LTE)

Short-term employees restricted by state law to 1,040 hours per hiring period. Wages are modest and limited state benefits are provided other than travel expenses outside the employment area.



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reservation system was created in 1974. A Forest Preserve category was created at Havenwoods within the City of Milwaukee in 1978. Seven new parks, nine trails, four Ice Age Units, and three recreation areas were added to the parks system through 1984.

Fisheries

State ownership of land for trout and warm water fisheries expanded from about 44,000 acres in 1969 to over 76,000 acres by 1984. Trout hatcheries received a boost with the construction of the Bayfield facility in 1971–72 and were now raising over seven million trout a year. Great Lakes stocking exceeded five million fish per year. Contractors were removing some six million pounds of rough fish from Wisconsin waters. As a result of the National Aquaculture Act in 1980, a Wisconsin study committee was formed in 1984 to develop a state aquaculture plan.

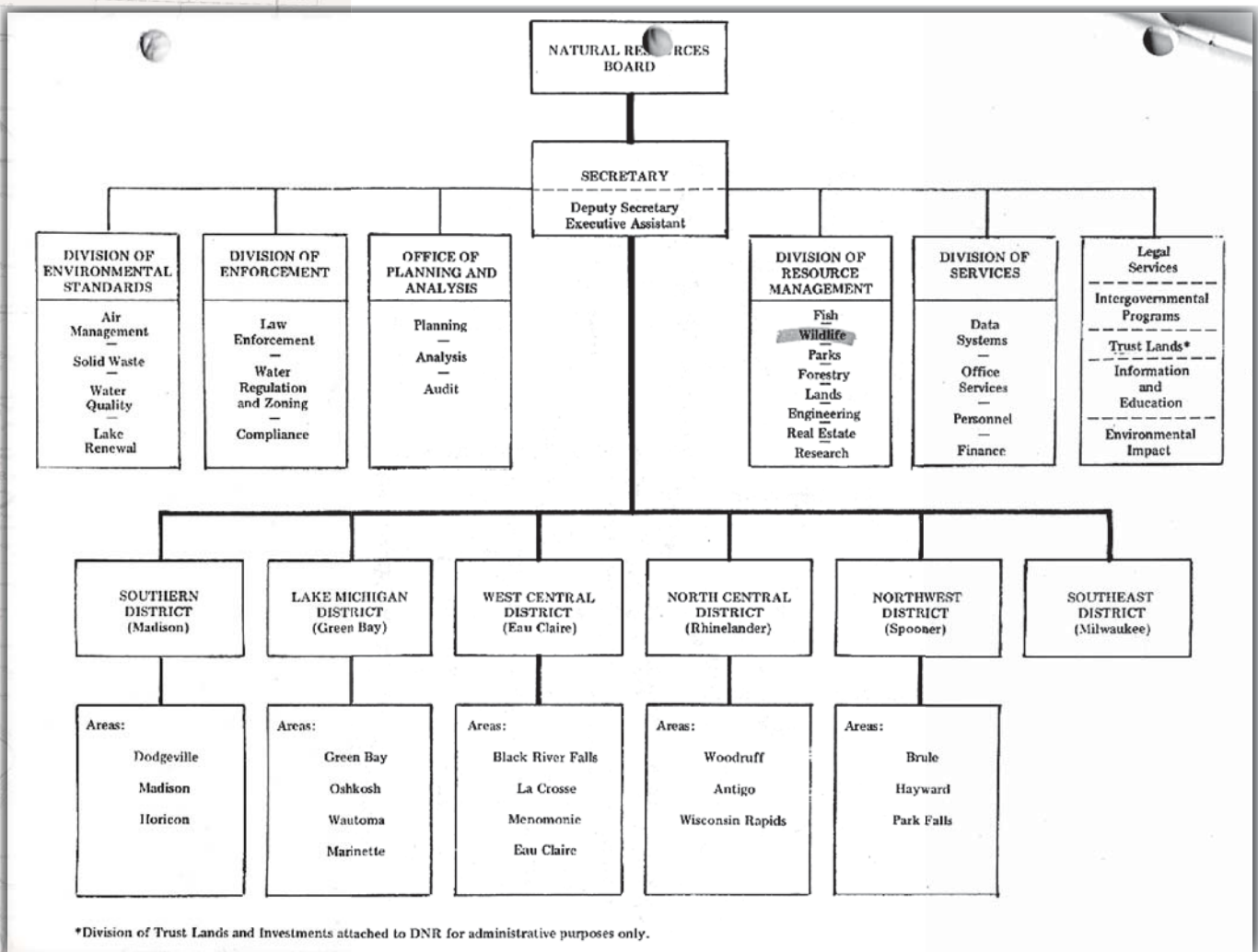
Law Enforcement

The Bureau of Law Enforcement maintained direct line authority over field wardens. Mandatory annual training requirements increased to 240 hours in 1972. In 1976, the first Native American coordinator was hired, marking the start of better tribal relationships. Warden cars began to be replaced by pickup trucks in 1977. The first full-time female warden, Eileen Wolf, was hired in 1977. Others soon followed including Victoria Ligenza (1979), Katie Short (1980), Barbara Wolf (1980), and LuAnn Kuzma (1982).

A fish and game violations hotline was established in 1979 allowing citizens to report conservation violations at any time. Field wardens credited a new deer shining

Historic Bayfield fish hatchery, 1944.

Wisconsin Department of Natural Resources Organization Chart, 1975-1977.



law and larger fines in 1980 with reducing illegal shining activity by 80%. Hunting safety concerns led to 1980 legislation that required blaze orange as the only clothing color authorized for deer hunting. The conservation warden force expanded from about 130 in the early 1970s to 167 by 1981.

Uniforms

Budget concerns precipitated many studies of agency expenses in the early 1970s. One such study involved an ad hoc uniform committee concerned that the purchase of work clothing, including uniforms, hip boots, waders, gloves, parkas, and similar protective clothing, was getting too expensive (\$50,000 per year). Following several months of study, no more "suntan uniforms" were issued after June 30, 1973. DNR identification cards and nametags, however, were to be issued where needed for public contact purposes.

Reorganization

More reorganization took place in the 1970s. The Natural Resources Board hired the consulting firm of Booz, Allen, and Hamilton in 1973 to analyze the DNR organizational structure and management systems. While the agency received a favorable report, it reduced the number of bureaus as a cost savings and efficiency matter. Six bureaus were reconstituted into three: Fish and Wildlife Bureau, Water Quality Bureau, and Forestry Bureau.

New district and area boundaries were created in 1975, and new staff was hired accordingly. The bureaus of Vacation and Travel Service and Commercial Recreation were transferred to the Department of Business Development the same year. Four new divisions were created in 1976: Environmental Standards, Enforcement, Resource Management, and Management Services.

New Headquarters

In 1979, the DNR central office was moved from the Pyare Square Building on University Avenue to General Executive Facility 2 (GEF 2) located at 101 South Webster Street, just one block from the state capitol. The move not only accommodated a growing staff but also provided an essential economic boost for the downtown area surrounding the capitol. Huge commercial mall developments on the east and west sides of Madison had produced a gradual loss of downtown businesses around the square. Combined with two other GEF buildings, the new offices added thousands of state and federal employees to the downtown area.

New Leadership

Late in 1980, Tony Earl left the agency to go into private law and prepare to run for governor. Surprisingly, a DNR insider and not a political appointee from outside the department replaced him. The new DNR secretary was Carroll D. "Buzz" Besadny, the former researcher and Resource Management Division administrator.

Besadny chose Bruce Braun as his deputy secretary and staff attorney Linda Bochart as his executive assistant. Besadny became very popular with the public, the Legislature, and DNR employees because of his pleasant personality and steady leadership.

New Environmental Law

The department's most significant programmatic changes occurring from 1969 through the early 1980s were in the category of environmental protection. In 1969, Wisconsin trash dumps were regulated for the first time, including landfill location, design, and licensing. In 1970, innovative air monitoring programs were put in place in southeast Wisconsin and made national news.

The Wisconsin Environmental Policy Act established in 1972 required state agencies to consider the environmental effects of their actions and to involve citizen participation in their decision making. DNR created the state's first Inland Lake Renewal Project in 1974 and expanded its Coastal Zone Management program to include the Great Lakes. State safe-drinking laws were also implemented.



Treaty Rights

Two Chippewa tribal members were cited for illegal spear fishing on Chief Lake in northern Wisconsin in 1974. The Lac Courte Oreilles band sued the state, claiming the arrests violated the terms of earlier treaties.

U.S. District judge James Doyle, Sr. of Madison ruled in 1978 that the Chippewa tribes lost their rights to hunt, trap, fish, and gather products of the land outside of reservations in an 1854 treaty. The tribe appealed the ruling to the 7th U.S. Court of Appeals in Chicago. In January 1983, the Seventh Circuit of the Federal Court of Appeals held that Chippewa off-reservation treaty rights existed in the ceded territory of northern Wisconsin. The Chippewa exercised their right to hunt deer for the first time off-reservation through a negotiation with the DNR in the fall of 1984. The resultant controversy riled northern residents and produced a new, time-consuming workload for attorneys, wardens, wildlife managers, fish managers, and foresters that lasted well into the 1990s.

The Gamekeepers

Numerous new laws and programs in 1976 put Wisconsin in the lead with one of the strongest environmental programs in the United States. A groundwater protection program was created by legislation that year. With a federal ban on PCBs, the state began to monitor and regulate toxic substances. The first fish consumptive advisory was issued warning people to limit consumption of certain fish in about 370 lakes and rivers.

The Nonpoint Source Pollution Program was created in 1977 to protect Wisconsin waters from runoff pollution. This program offered cost sharing to landowners and communities willing to keep soil, fertilizer, and street debris from washing into streams, rivers, and lakes. The department's private water supply section was also making big strides in improving water well standards. The federal Environmental Protection Agency evaluated Wisconsin's regulations and noted that its codes "now are probably the most comprehensive and stringent of any state, and possibly the world."

Regulations were established in 1979 on the use and application of pesticides. Standards for training applicators and pesticide registration became mandatory. When the federal Superfund program was created in 1980 to fund the cleanup of the worst hazardous waste site nationwide, Wisconsin placed 41 sites on the initial list.

In 1984, the Wisconsin State Legislature passed the strictest groundwater laws in the United States.

Urban smog was targeted in 1982 when annual truck and car emission tests were initiated in southeastern counties with tail pipe exhaust monitoring designed to comply with federal Clean Air Act mandates. In 1983, Wisconsin became the first state in the country to meet "fishable and swimmable" standards of the 1972 Clean Water Act.

In 1984, the Wisconsin State Legislature passed the strictest groundwater laws in the United States. At the same time, it created abandoned landfill and environmental repair laws and a new law establishing a statewide ban on laundry soap containing phosphorus. Groundwater regulations were established by administrative rule. The combination of regulations protected 16,000 public water supplies and 750,000 private wells in the state.

Conservation Congress

The Conservation Congress became recognized by state statute in 1971 as an independent organization of citizens serving to advise the Natural Resources Board:

15.348 Conservation Congress. The conservation congress shall be an independent organization of citizens of the state and shall serve in an advisory capacity to the natural resources board on all matters under the jurisdiction of the board. Its records, budgets, studies, and surveys shall be kept and established in conjunction with the department of natural resources. Its reports shall be an independent advisory opinion of such congress.

After three years under the leadership of Ted Jaeger, the 1972–73 members elected a new chairperson, an outspoken attorney who was becoming well known as the chair of the Columbia County delegation; his name was Francis William (Bill) Murphy. Richard Matty was elected vice-chair, and the secretary-treasurer was Henry "Hank" Liebrecht. Former warden Kenneth Coyle was the DNR liaison, replacing Herb Lemke.

Throughout the 1970s, conservation wardens, game managers, and fish managers worked closely with the five Conservation Congress delegates from each of Wisconsin's 72 counties. In addition to participating in public hearing agendas, these DNR personnel were assigned to transport county delegates to district and statewide meetings using state vehicles. This service was intended to improve relationships between the two entities as well as saving travel costs.

WCD/DNR historian and assistant to the secretary Walter Scott wrote the introduction to the 1974 Conservation Congress agenda booklet, reflecting on the 40th anniversary of its creation in the Capitol Assembly Chambers on May 14, 1934. The booklet text paid tribute to all the officers and committee chairs serving over this period



The DNR began a survey program in 1970 to determine levels of toxic metals in Wisconsin fish.

and highlighted pictures of deserving individuals, citing Jefferson County chair Marvin Lederer for serving for 37 consecutive years, Dan Trainer, Sr. of Princeton with 23 years, and Ed Keip of Two Rivers with 20 years—an indication of the dedication in their ranks.

Chairman Murphy addressed the future in the agenda booklet, setting the tone for the coming years. Murphy warned them not to rest on their laurels and to “use the past as the foundation for even bigger and more important tasks which the Congress will have to tackle if Wisconsin’s heritage of aggressive natural resources management is to be continued.” He also encouraged the delegates to recognize the importance of clean air and clean water for fish and wildlife and called for more environmental protection emphasis by the organization.

New Bureau Director

John M. Keener became the Game Management Bureau director (as it was called then) in 1969. Keener had 12 years experience on the staff under J.R. Smith and had participated in many statewide issues including the controversial “Deer Wars” and “Goose Wars.” This exposure likely influenced his personal management style that was reflected over the balance of his career.

Keener was born in Painesville, Ohio, on October 8, 1921. He grew up in Ohio and was exposed to a world of hunting and fishing like most boys of his generation. He graduated from Harvey High School in 1939 and started college at the Michigan College of Mining and Technology in Houghton, Michigan. Here, he learned to fly airplanes and after joining the Army Air Force taught others to fly while he was stationed at Houghton. After spending a short time in Mississippi, he finished his military commitment in Alaska.

He returned to school at Michigan Tech in 1946 and married Louise Leidich the same year. Still actively flying, an incident occurred over the college campus on October 12, 1946, that almost ended his life. Ice built up on the plane’s wings and forced him to crash-land on the campus athletic field. The plane was badly damaged, and Keener was trapped in the cockpit with a broken leg, mangled foot, and bleeding from a broken nose. Keener reflected later about his near fatal encounter: “I was very aware I was injured but thankful to be alive. I smelled the strong odor of aviation fuel about the same time a group of students arrived to rescue me. I screamed at the first one scrambling up the wing because he had a cigarette in his mouth!” That student turned out to be Ed Faber who would later work with Keener for many years in the Wisconsin Conservation Department. As a result of the accident, Keener walked with a distinct limp the rest of his life.

After graduating from Michigan Tech with a forestry major and a game management minor in 1949, Keener was hired by the WCD. His first assignment was as a biologist on the Deer Research Project in Ashland, Wisconsin. In 1950, he took over the Capercaillie Introduction Project on Outer Island. Many years later, Louise Keener recalled that “he never found any birds on the island, but he shared it with the Lullaby Baby Furniture Company personnel who were harvesting maple.” Two years later, he was assigned to the Experimental Forest Habitat Project in Rhinelander and, a short time later, in Woodruff.

Keener was promoted to the central office in 1956 to work as J.R. Smith’s administrative assistant. He was again promoted to become the assistant administrator in the Division of Fish, Game, and Enforcement in 1967–68 and briefly served as the assistant director in the Game Management Bureau in 1968–69. He became the Game Management Bureau director in 1969 and served as program leader until his retirement in 1984, except for a short stint as Inland Lakes Renewal Program director in 1974–75.

Keener was an extremely dedicated state worker, a “company man” who was devoted to the agency. He consistently arrived at work about one hour before normal working hours and continued the habit his entire career. He was fiercely dedicated to the Wisconsin hunter and defended that turf at every opportunity. Even though Keener tended to be introspective and often appeared somewhat aloof, he was very social, especially over a glass of brandy.



John M. Keener became the fourth person to lead the game management program.

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Early in his tenure as bureau director, he arranged a few informal get-togethers at his house with his staff and their spouses that grew into regular social events. This sort of fraternization created a bond between the staff members unusual in a bureaucracy and undoubtedly paid productivity dividends to his administration.

The staff soon learned that the Brittany spaniel was not only the best hunting dog breed but was probably the only dog they should consider while working under John Keener. His Brittany, "Tippy," was said to be his best friend, and he would virtually glow when reporting on the dog's most recent performance, especially when woodcock were being pursued. Since the bureau's deputy director, Kent Klepinger, also raised Brittany spaniels, other staff members and numerous field managers saw the wisdom of obtaining the same breed.

Keener loved woodcock hunting and belonged to a very unique Boscage Society (Boscage from the French word describing low, wet thickets... woodcock habitat) as testimony of his dedication to the sport. He lauded this special little bird that was described best by Aldo Leopold:

The woodcock is a living refutation of the theory that the utility of a game bird is to serve as a target or to pose gracefully on a slice of toast. No one would rather hunt woodcock in October than I, but since learning of the sky dance I find myself calling one or two birds enough. I must be sure that, come April, there be no dearth of dancers in the sunset sky.



Those who knew Keener well said that if a person got on his bad side, they likely would remain that way. On the other hand, if he was fond of a person, that person could do no wrong. Over time, several fieldworkers Keener put in the latter category were called "his fair-haired boys" by their coworkers. He was known to give a liter of brandy to those special people after motel room bull sessions as his way of rewarding them for being his kind of game manager.

During his tenure as director, Keener's personal traits aggravated some people, but there was no denying that his leadership and program innovations elevated Wisconsin wildlife management to one of the top programs in the country. He took particular interest in the Mississippi Flyway Council (described on page 187) and enjoyed working on waterfowl management issues. Ultimately, coupling his administrative skills with the biological expertise of researcher Dick Hunt, a positive national image was created for the state.

Dick Hunt was the chief waterfowl biologist in the Bureau of Research during Keener's entire tenure as Game/Wildlife Management Bureau director. Hunt had been working full-time in the waterfowl program since 1952 and had been Wisconsin's representative on the Mississippi Flyway Council's Technical Section for many years. His field research, numerous publications, leadership, and pragmatism on waterfowl management in Wisconsin established him as an eminent national authority.

Game Management Operations

The Game Management Bureau advanced technically and more comprehensively than ever before under John Keener's 15-year tenure. At the start of his regime in 1969, he had eight staff members, including a deputy director, Frank King. Others included Frank Haberland (promoted from game manager at Spooner to big game specialist), Edward Frank (promoted from wildlife research to farm game specialist), Kent Klepinger (operations), William Field (land appraiser, supervisor of private game and fur farms), Dan Owen (promoted from game manager at Poynette to land acquisition specialist), and Norval Barger (general administration). Fred Zimmerman, longtime waterfowl biologist converted to real estate appraiser under Field and transferred to the new Bureau of Real Estate in 1971.

District game supervisor positions operated in all six field districts to coordinate wildlife management activities on behalf of the district director. These positions provided a vital administrative link with field managers and were essential for ensuring timely and efficient communications in both directions of the chain of command. Area game managers operated under an area operations supervisor and directed field game managers, game technicians, and any LTEs assigned to the area.

Changes in personnel, new laws, and Keener's own philosophy significantly altered the game management program direction in the 1970s. Land acquisition and wildlife area development still received priority attention, but numerous new programs were created, and the traditional game focus changed to become more wildlife focused.

This alteration of priorities and a new planning system would challenge program personnel and intimidate some older managers as the profession became more complex.

Attorney Jim Christenson was designated legal liaison for wildlife regulation consultations soon after he was hired in January 1974. He became a frequent participant in bureau staff discussions and provided regular technical assistance in administrative rule and legislative formulation. His knowledge of the law, pragmatic application, and pleasant personality added immeasurable strength to the bureau's overall program. Christenson served in this capacity over the next two decades.

The management of *nongame species* accelerated nationally with the establishment of various endangered species laws in 1966 and 1969. State involvement resulted from U.S. Fish and Wildlife Service promotion of wildlife inventories to determine their status. Wisconsin was the first state to respond with laws to protect its own endangered species in 1971 (enacted in 1972). Revised federal laws produced the Endangered Species Act in 1973. Program details are presented in Chapter 10.

Keener discussed the game program ramifications of endangered and nongame laws with King and the rest of the staff. They concluded that much of the new endangered species program responsibilities would fall on them. With a vacancy on staff, Keener felt the opportunity to design a position to assume these new tasks was well timed.

Bureau and Staff Changes

Numerous modifications of the Game Management Bureau and its staff occurred from 1969 through 1976 and are shown in detail in Appendix L. Five significant changes are highlighted here because of their long-term impact on the program:

1. The waterfowl staff specialist position was modified to absorb nongame duties. Keener anticipated that his program would have the lead in implementing the new endangered species law because wildlife species were a key component of the law, and game managers were likely to carry most of the nongame workload. Wildlife areas also represented the largest potential land management opportunity. Ron Nicotera was hired for the waterfowl and nongame specialist position in August 1974.
2. Inexplicably, Keener was transferred to lead a new Inland Lakes Renewal program in 1974 (some speculated it was a disciplinary action because he argued deer quotas too vigorously with the Natural Resources Board).
3. The Game Management Bureau was consolidated with the Fish Management Bureau as a cost savings and efficiency measure about this same time in 1974. North Central District director John Brasch was appointed acting director for the newly created Fish and Wildlife Management Bureau, but he retained his district director position.
4. Within the new Fish and Wildlife Management Bureau, the former bureaus were renamed Fish Management Section and Wildlife Management Section. Kent Klepinger was appointed as acting section leader for the wildlife program. The wildlife name materialized in the section and bureau titles because of staff recognition of new endangered and nongame responsibilities that Ron Nicotera had pointed out would justify the title changes. Field game managers became officially recognized as wildlife managers after April of 1975 as two district game staff positions were filled by Carl Batha and James Raber. It was more than a cosmetic change. The management philosophy for wildlife and land management was distinctly altered. (More than 40 years after Leopold's revelation!)
5. Brasch chose to return to his district director position in 1975 as discussions were leading to separating the fish and wildlife programs again. An exam was given for the new Wildlife Management Bureau, and John Keener returned as the director in early 1976. Kent Klepinger was promoted to become the bureau's deputy director.



Nongame species

Defined by Wisconsin law as any species of wild animal not classified as a game fish, game animal, game bird, or furbearing animal.



PHOTOS: DNR FILE

*Central office Wildlife Management
Bureau staff.*

Left: Terry Amundson.

*Center (back row, left to right): John
Wetzel, Chuck Pils, Dave Gjestson,
Harry Libby.*

*Center (front row, left to right): Doris
Rusch and Ed Frank.*

Far right: Frank Haberland.

Staff specialist Dan Owen died unexpectedly in 1975, and with the retirements of Field, Barger, and King, section leader Klepinger had only the skeletal staff of Ed Frank (farm game), Frank Haberland (big game), and Ron Nicotera (waterfowl/non-game). New trainee Tom Niebauer provided some help before transferring to a wildlife manager position in Spring Green. The loss of Dan Owen led to the author's hiring in 1976. (From 1977 to 1983, Ed Frank was assigned special duties within the Planning Bureau, located within the Office of Planning and Analysis.) The staff was strengthened with the hiring of a budget specialist, Harry Libby (1978), a wetlands specialist, John Wetzel (1979), a furbearer specialist, Chuck Pils (1980), a wildlife disease specialist, Terry Amundson (1981), and a comprehensive planner, Doris Rusch (1982).

Klepinger interviewed and hired the first female wildlife manager, Diana Hallett, in May 1977. This was a precedent-setting event for the program, and no one could predict if it was a one-time occurrence or if more females would be hired over time. Because women were classified as a minority in the profession, they were in high demand nationwide. Getting Hallett on staff was considered a coup for the Wisconsin DNR.

Hallett was sent out on a six-month training tour of the state consistent with bureau policy for new personnel. Her mettle would be tested by heavy-duty work and snowstorms while skeptical males curious about her wildlife knowledge tried to test her mental toughness. Keener, known for his chauvinistic tendencies, was very impressed with his conversations with her and declared her "sharp." While she didn't remain long with the agency, the breakthrough for her gender was historic.

Klepinger interviewed and hired the first female wildlife manager, Diana Hallett, in May 1977. This was a precedent-setting event for the program, and no one could predict if it was a one-time occurrence or if more females would be hired over time.

The Legislative Audit Bureau studied the entire fish and wildlife programs from July 1, 1975, to June 30, 1976. Overall, the audit report was very favorable to the department for conducting sound conservation practices on very complex natural resources. Recommendations for improvement were in minor areas associated with general administration. Of special note, no shortcomings were reported in species management areas including the controversial deer program.

Change of Focus

The evolution of the endangered and nongame species program had a distinct and dramatic impact on traditional game management in Wisconsin as well as the nation. It not only led to the title change for wildlife managers but also generated the impetus

for broader ecological considerations for land management practices. Game species remained important work priorities, but they were no longer the only focus of management activities.

Expanding the traditional game program to include a broader spectrum of wildlife by the former Game Management Bureau was the correct strategy, but outsiders would question its sincerity for years (because the program remained game focused). Most wildlife managers endorsed the new way of thinking. Some did not, believing that non-game work took away effort that should be directed toward sportsmen-funded projects.

The volume of new programs and responsibilities during this period increased the workload for everyone. The bureau staff found that their individual work responsibilities detracted from their ability to guide statewide programs. Field managers and technicians found themselves spending more time in the office addressing an increasing bureaucratic paperwork volume. Fieldwork also became more difficult as environmental assessment requirements mandated not only endangered and threatened species considerations but also historical and archaeological analysis before work could start. The DNR's only archaeologist had to be consulted initially for an opinion of impact based on literature references. If the site was documented or likely to have historic or archaeological significance, either the DNR archaeologist or a representative from the Wisconsin Historical Society needed to inspect the site and make recommendations. The process meant more work and delays for property managers.

This combination of required scrutiny had obvious impact on wildlife management field activities. Projects often were modified to ensure that adequate protection was given to sensitive sites. Some projects were eliminated because modifications weren't possible or the manager thought it was too much trouble to pursue. Nonetheless, the result of the new procedure forced agency personnel to be more careful in managing the public's natural resources.

Plans and Planning

Work complexity and volume led to the development of various planning methods to systematically deal with them. Annual work planning became more formalized to establish budget priorities. Multiple use planning, a term applied to managing state-owned properties for all compatible uses, was created in 1972. This system evolved into a property master planning system in 1974.

Property master planning was an elaborate system developed to optimize resource management and its associated public recreation for all state properties. The premise was that the old style of management tended to limit management to one major purpose. For example, wildlife areas were managed for game production and hunting rather than for forestry, fisheries, endangered species, songbirds, nongame mammals, and other recreation. Master planning required a balanced team of foresters, wildlife managers, fish managers, park superintendents, and wardens to develop a plan, with public input, that would blend management to produce a more balanced outcome for a wider range of users. Initially, wildlife managers and fish managers were concerned that properties paid for by hunters and anglers would suddenly become park-like in purpose. That concern faded over time.

Property master planning was an elaborate system developed to optimize resource management and its associated public recreation for all state properties.

While the master planning principle was sound, the logistics of producing new management plans on over 600 state properties was challenging to say the least. Wildlife managers, already overbooked with normal duties, not only had to spend significant time organizing and leading a team of resource specialists for each wildlife area, they also served on other teams for fisheries, parks, natural area, and forest plans.

The associated work activities for master planning included evaluating state property capabilities, reviewing past management practices, assigning work, writing



PHOTOS: DNR FILE

Margaret Gafney (top) served as the Wildlife Management Bureau program assistant supervisor in the 1970s and 1980s. She was a no-nonsense person who wouldn't take guff from anyone, but was respected by all. Dee Fervor (bottom) worked as a program assistant.

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text, preparing maps, conducting public meetings, completing environmental assessments, obtaining engineering, problem solving, and much more. When controversy surfaced, the extended timeline not only delayed one plan from being completed and frustrated the public but also tied up personnel in a manner that usually delayed other master plans.

In July 1974, armed with new DNR training in “management by objectives” and prodded by the Fish and Wildlife Service, Fish Management Bureau director Jim Addis and Game Management Bureau director John Keener led their respective programs in undertaking yet another new process called “comprehensive planning.” Both leaders saw this as a way of becoming more competitive for limited funding as well as a way to communicate priorities within and external to the department. Wildlife managers began to joke that planning was now substituting for doing real work.

Species management plans were developed as part of the comprehensive planning process and became the backbone for the bureau's budget deliberations and the assignment of biennial priorities.

Comprehensive planning was an innovative process that improved the efficiency of the wildlife management operation and brought budgets to bear on the most important work needing accomplishment. However, it was complicated and required special efforts to develop the new system. Ed Frank carried the wildlife management planning responsibility and received the special assignment to work with the Office of Planning and Analysis in 1977 to develop strategic and operational plans. At the same time, he continued to coordinate the bureau's Farmland Wildlife Section.

Computers were just coming on line in state agencies, and technical operators were employed to assist each staff planner. Federal funding (Pittman-Robertson and Dingell-Johnson acts) was obtained for comprehensive planning in March 1976, but it would take three more years before an in-house plan was completed. Harry Libby, a wildlife manager stationed at Hayward, was promoted to the bureau staff as a program analyst in August 1978 and took the lead in future planning efforts.

Betty Les—a DNR employee who had just completed a similar assignment in the Bureau of Fish Management—was assigned the task of identifying and measuring the wildlife management workload. The assessment took over a year to complete and identified more than 600 distinct work activities needed to run the wildlife management program. This core data became the key ingredient for the new budget planning process and monitoring system.

Field workshops were conducted from August through November 1979 to indoctrinate field managers in writing projects for the 1981–83 biennium. A simplified public version of the strategic plan was completed by May 1980 and distributed to various conservation organizations. Wildlife managers appeared at numerous public meetings held around the state to describe the new planning process.

Species management plans were developed as part of the comprehensive planning process and became the backbone for the bureau's budget deliberations and the assignment of biennial priorities. Managers calculated how much time it took to complete each work task and the cost of any equipment or materials needed for the job. Compiling such data for target wildlife species as well as for recreational and administrative objectives enabled the program to identify all potential work projects for the biennium. Further, the committee work required of field and central office personnel created an excellent atmosphere of cooperation.

Armed with a list of proposed projects that identified work hours and associated costs, administrators could now decide what priority projects could be funded. Just as important, unfunded work would also be identified as part of the process, and the Legislature as well as the public would be notified of program shortcomings. Harry Libby kept the books and served as the program monitor for the staff, keeping them posted on budget balances and warning when problems surfaced.



Formal planning programs became standard tools for managers in the 1970s.

Central Office/Field Perspectives

Increasing staff workloads produced a pressure-laden work environment for central office personnel not envied by field personnel. While district employees (field staff working in each district) also had high work volumes and short deadlines, it was commonly felt that they had the better of the two worlds because they worked in the “real world” with everyday people and natural resources. Both central office staff and district field staffs carried full work schedules, but each thought the other “didn’t fully appreciate or understand their workload.” This overall view created a “we-versus-they” mentality that had some negative impact on communications, trust, and understanding within the entire agency.

Maintaining program credibility and providing leadership for the wildlife management program were constant challenges for Keener and his bureau staff. Keener and Klepinger both encouraged regular contact with the field, especially with district wildlife staff to ensure everyone knew about the important issues of the day. Informal bureau staff visits to various field stations were conducted on a regular basis to monitor program progress and instill camaraderie with field managers. Keeping district and area supervisors apprised about communications was mandatory or complaints would be filed (and were on several occasions).

The bureau staff routine required individuals to work independently on assigned work tasks, using their own initiative to plan, schedule, consult on, and implement various activities. Their responsibilities included regular contact and consultation with Keener and Klepinger, with the latter doing most of the consultation work. Again, routine contact with the appropriate district staff was considered mandatory. Klepinger had a great feel for issues and their priority as well as what information had to be relayed to Keener for his personal approval. Klepinger served an additional role representing Keener at many interdepartmental meetings.

The chain-of-command called for central office field orders to flow through the district director through the various area supervisors. Routine work generators and informational topics, however, were usually delegated to the district staff specialists for action as long as the chain knew what was going on. The procedure varied by district based on the personalities of the leaders. Topics dealing with significant work time or expenses always needed to follow proper channels and were always in writing (memorandum).

The district staff specialists operated a little differently based on their own personalities. Some gave firm orders and direction to the wildlife managers in the field, and others were more casual in passing on guidelines for field activities. Budget control was a high priority for all of them, and frequent monitoring of expenditures as well as locating additional funding when shortages occurred were important activities. None of them were shy about blaming the central office or bureau when disagreeable tasks were required or when short deadlines were given to time-consuming assignments. Again, keeping their own district supervisors informed was mandatory.

Keener placed a high priority on conducting a two-day annual state meeting with managers and researchers, and the participants agreed the priority was well placed. He thought the opportunity was ideal for relaying important educational and programmatic information but was equally as important for camaraderie and interactions between the participants. Paying for a facility, meals, and lodging for 150 or more participants was expensive, but Keener felt the meeting was vital and insisted that funding was always to be budgeted.

The annual meeting agenda usually presented a mix of research findings and timely wildlife management topics. Typically, an awards banquet was held in the evening, and a keynote speaker would offer stimulating words to educate the attendees. The Grimmer Award honoring the “Game Manager of the Year” (Appendix H) was also presented at the banquet; the title shifted to “Wildlife Manager of the Year” after 1976. In 1981, the “Wildlife Technician of the Year” award was created, and all techs were invited to the meeting for the first time.

I introduced a more informal award system in about 1982 to lighten up an otherwise serious program. I was also concerned that job stress was taking a toll and



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reasoned that a little humor would help improve everyone's state of mind. I entitled the new award the "Wildlife Yearly Muddy Eye Award (or WYME)." Managers and staff were encouraged to document funny or embarrassing deeds by their peers and present an appropriate award at the annual meeting. It proved popular with everyone and continued into the next century.

Wildlife Research

(Author's note: Gerald Bartelt provided extensive research and editing for this section.)



PHOTOS: DNR FILE

*Research Bureau staff:
Left: Bob Dumke (standing).
Center (left to right): Sue Nehls,
Ruth Hine, Kent Klepinger.
Far right: Jim March.*

The Bureau of Research was still headed up by Cyril Kabat until he stepped down as bureau director in 1981 in preparation for retirement three years later when Kent Klepinger replaced him. The Wildlife Research Section was still under the supervision of James Hale during the start of this period. Hale later left the bureau to lead the new Office of Endangered and Nongame Species in 1978 and was replaced by Jim March. March led the section until 1981 when he left research to become assistant district director of the Southern District. Bob Dumke then replaced March, and Dumke remained Wildlife Research Section leader throughout the decade.

The Wildlife Research Section was led by a "section chief" and was composed of three groups: Wetlands Wildlife Research, Farmland Wildlife Research, and Forest Wildlife Research. Fourteen scientists and four wildlife research technicians made up the staff in the early 1970s. The staff was reduced to 13 scientists and three wildlife research technicians by 1984. In addition, statistician Don Thompson, editor Ruth Hine, and publication specialist Sue Nehls aided the staff.

Funding

Wildlife Research Section support money came primarily from a Pittman-Robertson federal aids grant that was used to support wildlife research projects and personnel salary. Some fish and wildlife segregated license revenue was also used.

Issues and New Programs

Wildlife research primarily addressed single species game research, and one scientist typically studied the subject through a project conducted alone or with the help of a technician. One notable exception was a large integrated and interspecies study conducted on pheasants, predators, and habitat at the Waterloo Wildlife Area. It was the first large-scale collaborative study that integrated research from several researchers to provide a more ecological understanding of predator-prey-habitat dynamics.

Other important research issues of this period included the following:

- Continued development of the scientific deer management program
- Duck population and harvest dynamics
- Evaluation of the newly created Waterfowl Production Area program by the federal government (Fish and Wildlife Service)

- Aquatic plant management
- Forest management for deer and ruffed grouse
- Status and distribution of gray partridge and white-tailed jackrabbits
- Development of population indices for black bear, bobcat, and river otter

Contracts and Collaboration

The Wisconsin Cooperative Wildlife Research Unit (Coop Unit) was established in 1972 to stimulate cooperation between state and federal agencies and universities as well as to facilitate research and funding for projects not otherwise possible by individual cooperators. The participants were the Wisconsin DNR, the University of Wisconsin-Madison, the Wildlife Management Institute, and the U.S. Fish and Wildlife Service. Dr. Donald Rusch of the University of Wisconsin-Madison faculty was the unit leader. The Coop Unit became and still is a vital part of the DNR wildlife research program. Projects undertaken by the Coop Unit required the approval of a coordinating committee of which a Wisconsin DNR representative was a member. As a result, research projects implemented by the Coop Unit were most often projects that were a high priority topic for the DNR.

The Coop Unit used graduate students to study a variety of topics important to Wisconsin wildlife. Initial studies included ecology and survival of Canada geese, ecology of American coots, duck plague (duck virus enteritis, DVE), ecology of coyotes, deer damage in apple orchards, and breeding birds in southeastern Wisconsin woodlots. One of the unit's first students, Scott Craven, completed a study on giant Canada geese at Rock Prairie Wildlife Area. Craven also initiated the first study in a long series of studies that continued throughout the 1970s and 1980s on Mississippi Flyway Canada geese migrating through Wisconsin. He went on to become a professor and then chair of the Department of Wildlife Ecology at the University of Wisconsin-Madison.

Another long-term project started at this time was a study of the eastern prairie population of Canada geese in Manitoba by Don Rusch and his students. These goose projects provided the largest, long-term sampling of Canada geese in the world, and the data enabled fall flight forecasts for the Mississippi Flyway and eastern prairie populations of Canada geese. Participating wildlife managers from Wisconsin and several other states were thrilled at the prospect of walking on the tundra near Churchill, Manitoba, looking for goose nests while an armed partner worried about blundering into polar bears.

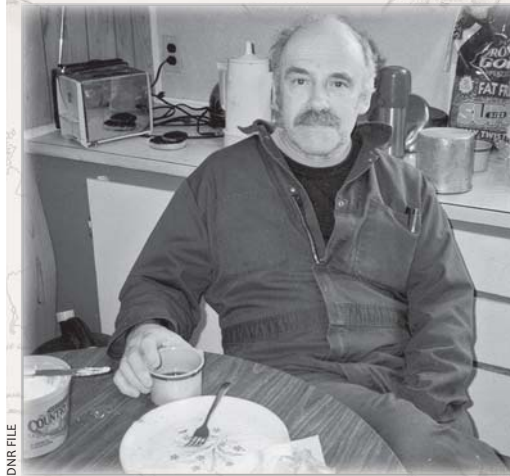
By 1980, Coop Unit projects included the winter ecology of Canada geese in the Mississippi Flyway, the distribution and ecology of redhead ducks at Horicon National Wildlife Refuge, evaluation of population indices for water birds at Horicon Marsh National Wildlife Refuge, harvest rates of ruffed grouse in central Wisconsin, and an assessment of environmental disturbance caused by mining in northern Wisconsin.

Dr. Robert McCabe, then chair of the Department of Wildlife Ecology at the University of Wisconsin-Madison, served on the DNR Research Advisory Committee that annually reviewed current Wisconsin DNR research projects and provided direction for future DNR research. His critical reviews and extensive research experience provided clear benefits to the department's research program.

Orrin Rongstad, tenured professor at the University of Wisconsin-Madison, was often at odds with DNR colleagues over various aspects of deer management, but he and his students added a wealth of information on deer movements and ecology through *radio telemetry* studies conducted throughout Wisconsin. Rongstad also conducted research on cottontail rabbits and coyotes in the state and was active in early elk restoration discussions.

Other cooperative research took place during this period with DNR scientists and several professors at the UW-Stevens Point and the UW-Green Bay. This cooperative research usually was accomplished through contracts with the DNR supplying funds and the university professor providing a graduate student who conducted the research:

- Dr. Dan Trainer (UW-Stevens Point) conducted a number of research projects on wildlife diseases and parasites in wildlife populations as well as provided *necropsy* and disease monitoring services for the department.



Don Rusch, University of Wisconsin-Madison ecology professor, was extremely active with the DNR.

Radio telemetry

The tracking of radio signals from transmitters placed on or in animals.

Necropsy

Internal examination of an animal after death.

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- Dr. Lyle Nauman (UW-Stevens Point) investigated the effects of contaminants on wildlife populations at the Buena Vista Marsh area and ecto- and endoparasites of black bears.
- Dr. Ray Anderson (UW-Stevens Point) supervised a graduate student investigating the homing tendencies of relocated black bears and the reintroduction of American marten into the Nicolet National Forest. He also supervised a number of students investigating prairie chicken populations and ecology.
- Dr. Neil Payne (UW-Stevens Point) had students working on habitat use and food habits of black bears and home ranges and habitat use of fishers. Other graduate students under his supervision investigated sharp-tailed grouse, sandhill cranes, and waterfowl productivity in central Wisconsin.
- Dick Stiehl (UW-Green Bay) collaborated on a gray partridge study in eastern Wisconsin trying to improve its population status.

Assistance to Other Programs

DNR wildlife researchers played prominent roles in wildlife management decisions and issues during this period, serving on key committees and advising on important management decisions:

- Dick Hunt played a key role in decisions made for Wisconsin waterfowl management and waterfowl hunting seasons as a representative to the Mississippi Flyway Council Technical Section.
- Keith McCaffery worked closely with the Bureau of Wildlife Management staff to determine deer quotas and set deer harvest goals.
- Bruce Kohn and Bill Creed employed otter, bear, and fisher research results to set harvest goals and regulations for these species.
- Chuck Pils utilized red fox research data to set up the beginning of new fox hunting and trapping season regulations in 1972.
- John Gates, Jim March, Bob Dumke, and all of the Wisconsin DNR's Farm Wildlife Research Group along with Ed Frank from the Bureau of Wildlife Management were very active on the Midwest Pheasant Council. This organization provided a forum to exchange research information and develop farmland management recommendations and guidance for federal Farm Bill legislation.
- Larry Gregg, Jim Hale, and Jim March were actively involved in the Webless Migratory Bird Technical Committee at the national level. All of the Wisconsin DNR's Forest Wildlife Research Group personnel were involved in the Great Lakes Deer Group and played key roles in the group's activities. Jim March also played a major role as an advisor in selecting wetlands for the federal Water Bank Program administered by the U.S. Soil Conservation Service.

Deer Studies

One of the most important deer research studies of the period was conducted by John Kubisiak, Bill Creed, Keith McCaffery, Thomas A. Heberlein, and Bruce Kohn on the Sandhill Wildlife Area. Numerous experiments and studies monitoring the deer population and deer hunter behavior were documented on the property between 1963 and 1989 that led to improvements in Wisconsin's deer management program. While listing all of the research is not possible, the following research topics were among those addressed:

- Bow and arrow hunting, 1963–68
- Handgun hunting, 1970
- Muzzle-loader hunting, 1977–78
- Trophy hunting, 1981–86 and 1987–89
- Hunter performance profiles

Any-deer hunt

Deer hunting season in which the legal harvest is a deer of any age or sex. Also known as either-sex hunt.

Antlerless-only hunts

Deer hunting seasons in which the legal harvest is restricted to deer without antlers or with antlers less than three inches in length (short spikes).

- Total deer removal hunt
- Trophy buck management
- Observations on satisfaction, crowding, and trophy buck management
- Valuation studies of trophy buck hunting opportunities
- Evaluation of population estimation methods
- Analyses of population parameters and indices
- Deer habitat relationships

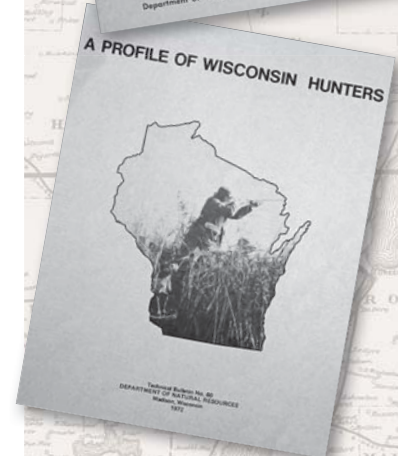
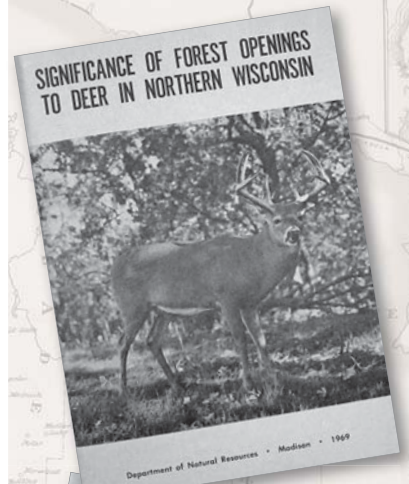
One of the most unusual of the above studies was conducted by John Kubisiak, Bill Creed, Keith McCaffery, and Bruce Kohn on the Sandhill Wildlife Area in 1972-73 when a "total removal" deer hunt took place. Herd structure and health were determined from the complete removal of all deer within the 9,150-acre fenced demonstration area, which was followed by the subsequent reintroduction of deer. Not only did the study confirm that hunters were capable of removing all the deer from the study area but it proved beyond a shadow of doubt that wildlife professionals knew how to "count deer."

Two important sociological studies were also completed at Sandhill:

- UW-Madison sociologist Tom Heberlein investigated hunter perceptions of satisfaction and tolerance of crowding during "*any-deer*" and "*antlerless-only*" *gun deer hunts* and hunter perceptions under a harvest strategy of "trophy buck management."
- UW-Madison economist Rich Bishop conducted a study of the economic value of trophy buck deer hunting to deer hunters at Sandhill.

A number of other significant studies were conducted elsewhere in the state during this period:

- Keith McCaffery and Bill Creed studied the role of forest openings in summer deer range, and in 1969 published their findings in *Significance of Forest Openings to Deer in Northern Wisconsin* (Technical Bulletin 44). This publication was an important contribution to deer habitat management.
- In 1972, Lowell L. Klessig and James B. Hale published their precedent-setting study, *A Profile of Wisconsin Hunters* (Technical Bulletin 60). This important research started a trend to study the social aspects of hunting and led to many changes in wildlife management policy and regulations. Among the hunter profile findings, some interesting facts surfaced: 62% of hunters were rural, 77% were blue-collar workers, only 20% had attended a Wisconsin DNR public meeting during the previous five years, and "enjoying nature" was cited most often as the reason they went hunting.
- In 1979, Dr. Robert Jackson and Dr. Robert Norton of the UW-La Crosse undertook another sociological study (unpublished) of Wisconsin deer hunters in which almost half of deer hunters indicated that their interest in deer hunting had increased the last few years and that poaching and trespassing were the most serious deer hunting violations, and 66.4% said if they only had one more hunting day in their lifetime, they'd want to hunt deer with a gun.
- Researcher Bruce Kohn developed a winter-severity index in 1975 that enabled the department to quantify the impacts of winter on deer and created a standard for year-to-year comparisons. The system simply added the number of days between December 1 and April 30 when the minimum temperatures were zero or below and the number of days when standing snow depth was 18 inches or more. Days when both conditions existed received a point value of two. A season long index of less than 50 was considered mild; 50-80 moderate; 80-100 severe; and over 100 very severe. The winter-severity index proved to be very reliable over the years and is still used today. Other states have adopted the index and report it has been very useful.



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- An important contribution to deer management, Keith McCaffery's study on deer trails as an index to deer populations and habitat use resulted in a paper entitled "Deer Trail Counts as an Index to Populations and Habitat Use," published in the *Journal of Wildlife Management* in 1976.
- Chuck Pils, Mark Martin, and Jim March conducted the first research involving southern Wisconsin deer and published their findings in Research Report 112, *Foods of Deer in Southern Wisconsin* (1981).
- In addition to standard research projects, the Forest Wildlife Research Group continued to work on evaluating and developing deer population surveys and provided guidance on deer population monitoring and harvest quotas for the state.

Data from these studies and others were used to establish the DNR's current deer management program, considered one of the best in the country.

Upland Game Bird Studies

Two long-term studies on ruffed grouse were begun during this time period. Jack Moulton initiated a ruffed grouse habitat management evaluation at Stone Lake in 1967. Keith McCaffery and technician Jim Ashbrenner assumed the study when Moulton left the department in 1978. This project resulted in several publications and a population database that continues to the present time. The study also provided new information on the response of ruffed grouse population densities to habitat management using forestry silvicultural techniques. From 1968 to 1984, John Kubisiak conducted a parallel grouse habitat study at Sandhill that also included measures of harvest exploitation. Kubisiak continued the habitat survey until his retirement in 1996, and it is still run by wildlife managers to provide a comparison base for the statewide ruffed grouse survey.

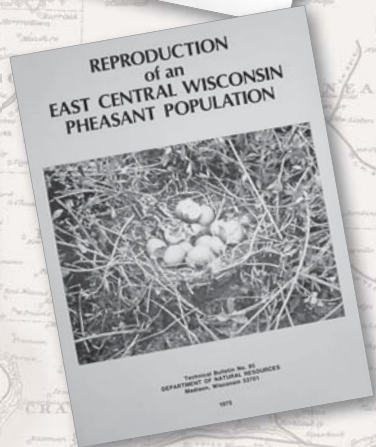
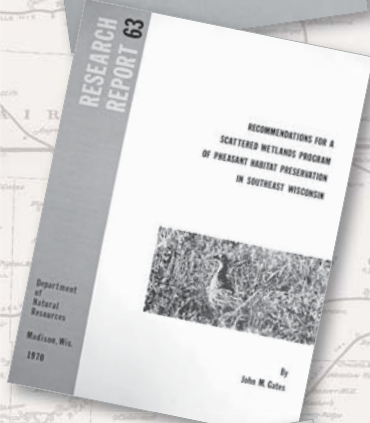
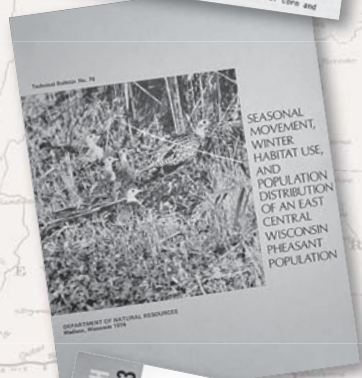
One of the more important publications of the decade was Technical Bulletin 76, *Seasonal Movement, Winter Habitat Use, and Population Distribution of an East Central Wisconsin Pheasant Population* by John Gates and James Hale (1974). This study reported on an incredible 7,600 movement records on 2,323 marked pheasants in Dodge County from 1958 to 1966. In addition to simply learning more about pheasants, Gates discovered that 88% of pheasant winter use was associated with wetland cover. The winter-use revelation would permanently alter the department's pheasant management strategy. Gates' and Hale's publication won the "Monograph of the Year" award from The Wildlife Society in 1976. In 1970, John Gates published another segment of this study entitled *Recommendations for a Scattered Wetlands Program of Pheasant Habitat Preservation in Southeast Wisconsin* (Research Report 63), which served as a model for wetland acquisition for wildlife managers throughout Wisconsin.

Larry Gregg conducted a long-term study on the ecology of woodcock in northern Wisconsin (1967–80), investigating distribution, breeding biology, habitat use, movements, and population dynamics of woodcock in Wisconsin. This study greatly increased knowledge of woodcock in Wisconsin and provided harvest and habitat management recommendations.

Gates and Hale followed up with another long-term study published as *Reproduction of an East Central Pheasant Population* (Technical Bulletin 85) in 1975. This study greatly increased game manager understanding of pheasant nesting phenology, nest distribution, clutch size and production rate, hatching distribution, brood size and mortality, annual variations, nest success, and causes of failure.

An innovative, integrated, and collaborative study was conducted on pheasants at the Waterloo Wildlife Study Area: Bob Dumke and Chuck Pils conducted a radio telemetry study (a new technology for the time) on the mortality and behavior of pheasants at the Waterloo Wildlife Area; Ed Frank and Gene Woehler studied the habitat used by pheasants; and LeRoy Petersen and Chuck Pils investigated the role of predators on pheasant mortality in the same area.

Petersen's work resulted in publications on the population dynamics of great-horned owls and red-tailed hawks, and Pils' work resulted in a publication on population



A Change of Focus, 1969-1984

dynamics of red fox. Although this research concluded that predators were the primary cause of mortality on pheasant populations, a strategy to reduce predator populations was never implemented because of a new understanding of the ecological role of predators in the environment and changing public attitudes toward predators.

Researchers Bob Dumke and Chuck Pils received The Wildlife Society's award for wildlife publication of the year for Technical Bulletin 72, *Mortality of Radio-tagged Pheasants on the Waterloo Wildlife Area*, published in 1973.

Waterfowl Studies

Another important study published in 1978 was *Mallard Population and Harvest Dynamics in Wisconsin* (Technical Bulletin 106) by James March and Richard Hunt. The core data they used were from 1967 to 1972, but they also analyzed band recoveries from about 48,000 banded birds from 1961 to 1972. The study revealed the important contribution of locally produced birds in Wisconsin to the annual duck harvest in Wisconsin. These findings influenced Wisconsin waterfowl hunting regulations and habitat management strategies.

Bill Wheeler conducted a study to determine the importance of scattered wetlands on private lands for duck production in Wisconsin and completed another study to determine the importance of a large public wildlife management area, Grand River Marsh, to the local production of ducks.

John Beule conducted a study on management and control of cattails that was useful in keeping marshes from becoming choked with monotypic cattails, which was not good waterfowl habitat.

Published in 1969, *Techniques for Wetland Management* (Research Report 45) by Arlyn Linde became the game manager's handbook on the development and management of Wisconsin marshes.

Other Research

A considerable number of technical bulletins were published through 1984, including studies on prairie chickens, muskrats, Canada geese, breeding duck populations, gray partridge ecology, ruffed grouse, and black bears. Research reports produced in the late 1970s included species status reports on badger, fisher, bobcat, gray partridge, barn owl, and sharp-tailed grouse. From 1940 through 1984, the DNR research program produced 294 wildlife-related publications and 658 publications in all.

Wildlife Surveys

Researcher Donald R. Thompson developed a more systematic method of hunter questionnaire distribution in 1970. Questionnaires were distributed by county based on the number of licenses sold in each county. Individuals were randomly selected from the previous year's sales. The inquiry garnered a 45% return rate, and harvest trends expanded from that data. Wild turkey harvest numbers were obtained from mandatory registration records.

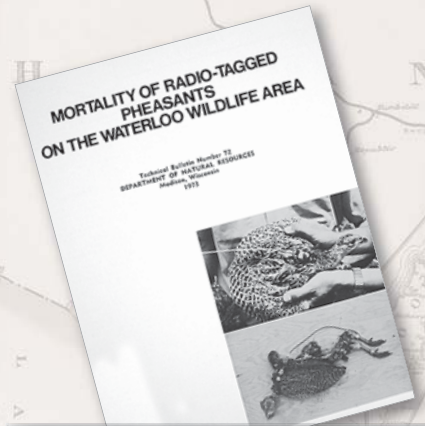
Wildlife Land Control

Land acquisition and leasing continued to expand the public hunting grounds system. Fee title ownership increased from about 312,000 acres in 1969 to over 400,000 acres in 1984. Public hunting grounds leasing had been dwindling over the years but received a boost in 1978 when an "accelerated leasing" effort bounced the program back up to 165,000 acres.

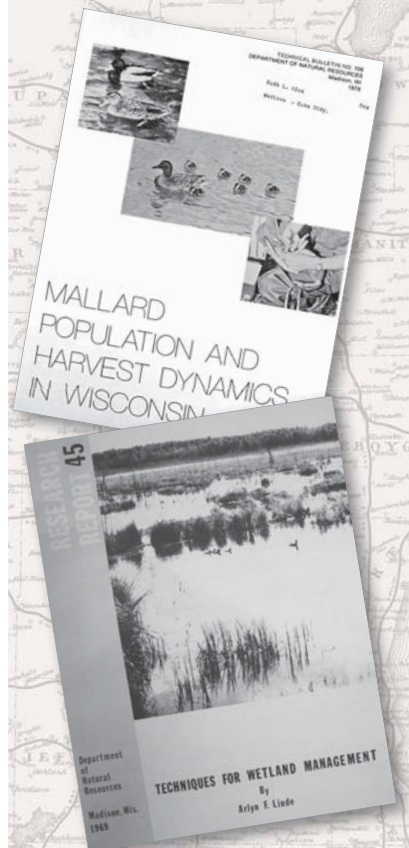
Some workload relief occurred in 1967 when the Bureau of Real Estate was created. New land agent positions took over some land acquisition activities that had been absorbed by game managers including time-consuming negotiation, appraisal, and optioning work. Other new wildlife work, however, was also increasing in volume and continued to place more demands on the game manager's time.

Another land control activity to surface was the federal Waterfowl Production Area (WPA) land acquisition program in 1975. Wisconsin had never been considered

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Researchers Chuck Pils (left standing) and Bob Dumke (center standing) received The Wildlife Society's award for wildlife publication of the year in 1973.





DNR FILE

a duck production state like the Dakotas or Minnesota, but data surfacing from mallard research being done by Jim March and Dick Hunt coupled with some politics led to the Fish and Wildlife Service (FWS) purchasing land in the state. The WPA program concentrated on securing brood water and adjoining upland nesting cover for ducks. Wildlife managers purchased several thousand acres over the next decade and took on the management of these lands as well.

The political story of the WPA program creation was spawned by a dilemma facing the FWS at the Horicon Marsh National Wildlife Refuge. They were attempting to develop an automobile touring route off State Highway 49, but Wisconsin environmental impact evaluations prevented completion of the project. Harvey Nelson, regional director for the FWS, met with Secretary Besadny and John Keener to work out a compromise. In addition to some environmental modifications for the project, the WPA program materialized as a wetland mitigation measure.

The state duck stamp created in 1978 also provided significant funding for wetland protection and development. For the first time, state waterfowl hunters—who had been supporting federal projects for years through the purchase of the federal duck stamp—now had the opportunity to provide funds specifically earmarked for improving waterfowl habitat in their own state. Some individuals resented this add-on cost, but the overwhelming majority was enthusiastically supportive of the concept.

The acquisition program continued to improve when the Scattered Wetlands Program was redesigned. Originally created in 1944, the program consisted of randomly purchased wetlands not associated with any specific objective. Researcher John Gates recognized the important relationships between wetland wintering cover and upland nesting habitat during his pheasant study, so a change in acquisition procedure was now warranted.

Gates recommended redesigning the scattered wetlands program in a 1968 memorandum to the Research Bureau. However, it wasn't until Gates completed his pheasant studies that the Wildlife Bureau staff headed up by Ed Frank took a serious look at scattered wetlands. The results produced a new Extensive Wildlife Habitat Program in 1978 using Gates' scientific findings as criteria for purchasing land.

Species Management

Hunting regulations and harvest analysis remained the most important long-term tools in the wildlife manager's toolbox and, coupled with its public property management activities, contributed to producing one of the nation's finest state wildlife management programs. The trend for conducting early public meetings and soliciting more public input on a variety of wildlife management issues continued and greatly improved program acceptance and agency credibility.

Comprehensive planning enabled the staff to sort through hundreds of potential work projects and select only the highest priorities for work commitments. Wildlife research continued to add scientific knowledge to the system. Species management committees constantly assessed new information and kept planning strategies current.

Wisconsin's management priorities still included white-tailed deer—justifiably so because deer hunting license sales generated a significant portion of the wildlife program revenue. Black bear research received more attention since the animal was elevated to big game status in 1974. The success of wild turkey reintroductions exceeded everyone's expectations and would be one of the wildlife success stories of the century. Pheasants, ducks, and Canada geese received much less of the manager's time but still were important because they generated significant hunting recreation.

Other wildlife got attention only as time allowed, which was usually accomplished because a crisis arose or the manager was dedicated enough to take on a task over and above an eight-hour work day. Prairie chicken, bald eagle, osprey, and cormorant surveys and management received specific attention. Many other nongame species benefited from land management activities aimed at improving game populations. Later infusion of college graduates with more ecologically based training would bolster these management efforts.

Deer Administration

As usual, the deer program was the biggest and most controversial program on the bureau's agenda. The annual deer harvest was already among the highest in the nation with the annual gun kill jumping from an impressive 119,986 in 1968 to 256,887 in 1984. Hunter participation responded to this success, and deer hunting license sales grew from about 500,000 in the 1970s to over 650,000 by 1984.

Big game specialist Frank Haberland was inundated with correspondence and telephone contacts so often that research and planning time was impossible unless he turned off the telephone and let a score of daily letters pile up unanswered while he did priority work. Haberland undoubtedly had the hardest job on the staff because he dealt with over one-half million deer hunters, many expressing disdain or distrust for the agency. Further, the Conservation Congress also claimed expertise in that area, and their members expounded on that view regularly, especially their outspoken chair, Bill Murphy.

Unanswered correspondence bothered Haberland. He felt that regardless of the writer's position (often angry at DNR), the writer was entitled to a response. Since there was simply no work time available and without anyone's knowledge, he collected letters each month and took them home where he devoted the weekend to writing personal responses. He only revealed this work habit after retirement.

Deer researchers Bill Creed and Keith McCaffery provided Haberland with solid data now that the Sex-Age-Kill (SAK) and Hunter's Choice systems were in place. Fall harvests became predictable, but Haberland was always reluctant to project harvest figures because he knew all he had to do was be off *one year* and program credibility would suffer. Nonetheless, he started a very successful string of fall harvest predictions in the 1970s that would continue for many years because the news media insisted on it and it was such popular information.

Deer Harvest Mechanics

One of the most vital parts of the wildlife program was determining the number of antlerless deer to be killed in each management unit during the fall hunt. Wildlife managers collected most of the core data needed for these assessments by conducting pellet group counts, trail surveys, summer doe/fawn ratio observations, registration, and aging.

Calculating the biologically based harvest quotas was the easy part of the process. First, the deer population in each management unit was calculated using the SAK formula (mathematical model that combines harvest, age and fawn-to-doe ratio data). Then, several years of deer harvest history were analyzed to identify trends and success rates of previous antlerless quotas. Knowing the amount of deer range in each deer management unit and the over-winter goal enabled the wildlife manager to establish the number of antlerless deer to be removed from the population during the fall hunting season.

One of the most vital parts of the wildlife program was determining the number of antlerless deer to be killed in each management unit during the fall hunt.

Wildlife managers ran their preliminary figures for each deer management unit by Creed and McCaffery before the figures became final—from the department standpoint. The hard part came when these numbers were presented to the Conservation Congress for review and endorsement. The long (and often laborious) public portion of the deer quota process started at the county level. The wildlife manager would explain the recommendations to the five Conservation Congress delegates representing each county. The deer kill history and the over-winter management goals were reviewed and the appropriate SAK data explained for each deer management unit. There would be many questions, and the reliability of the data would be examined in detail.

Typically in the 1970s, a predictable portion of Conservation Congress county delegates would object to the game manager's recommendations and request a very



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subjective 50% reduction in the proposed quota. How the delegates obtained their own deer observations and arrived at this random figure was highly variable, not very scientific, always biased, but seldom questioned by fellow delegates.

Sometimes delegates based their opinion about deer numbers on what they saw the past season. Those who claimed regular road driving activity usually received a high degree of credibility from their peers. Someone who actually traveled by airplane and saw or did not see deer was considered a more “technical” information source. A classic story of the time demonstrating the looseness of delegate data sources was when Bill Murphy began one of his speeches by saying “me and Ernie took a survey.”

The early policy of John Keener was that over-winter deer population goals could be negotiated, but deer harvest quotas were strictly biological and were not subject to that process. Tradition, however, prevented that from happening. The Conservation Congress leadership felt they had a fundamental right to debate antlerless deer harvest levels and recognized they could parley that controversial topic into more public interest in their organization.

After confirmation with deer research personnel, the only department authority for modifying the wildlife manager’s deer harvest quota recommendation was the DNR secretary. If the quota was voted down at county hearings, it received another level of scrutiny at the statewide Conservation Congress meeting.

Quota negotiation discussions at the statewide meeting involved Keener, Haberland, the appropriate district wildlife staff specialist, and sometimes the local wildlife manager along with Bill Murphy, the Conservation Congress Big Game Committee chair, and the appropriate county delegate representative. Most often, a compromise would be reached, but the resultant “political harvest quota” was very unpalatable to the entire DNR staff.

On occasion, the deer population data presented to Keener by researchers and wildlife managers were so strong and the antlerless harvest so critical for achieving over-winter goals that compromise with the Conservation Congress was not possible. In those instances, Keener wouldn’t hesitate to argue his case with the DNR secretary to elevate the decision making to the Natural Resources Board. However, the secretary didn’t like airing disagreements at that level, and the board members didn’t like to be placed in the position of making political decisions on biological topics. Keener pursued that route several times and took administrative heat for doing so.

A Deer Debacle

Conservative harvest quotas resulting primarily from Conservation Congress negotiations led to the inevitable deer herd buildup in the early 1970s that had management and research concerned. When the total gun harvest hit 117,000 in 1975 and deer hunting license sales peaked at almost 600,000, Keener told the Natural Resources Board that he thought the combination of herd growth and increased participation was leading to a marked decrease in hunting quality. Law enforcement arrest records and warden observations backed up Keener’s opinion.

Later in 1976, Keener felt it was time to ask the public for their opinions. With license sales increasing over 117% in just 20 years and the largest deer herd in history on the landscape, Keener and a cadre of staff members felt that uneven hunting pressure was resulting in a general failure of the existing regulations to harvest deer properly. Further, excessive hunting pressure was leading to intense competition, poor hunter behavior, increased illegal activity, landowner-hunter friction, unsafe conditions, and a poor public image of hunters and hunting in general. A season framework change was endorsed by Secretary Earl and advanced to the Natural Resources Board.

At the end of August, the Natural Resources Board directed the Bureau of Wildlife Management to hold public meetings throughout the state on alternatives to improve deer hunting quality and report results to the board in October. With little preparatory time, the wildlife and research staff quickly designed alternatives with support information and briefed field managers on procedures for conducting public meetings. Wildlife managers dutifully scheduled a series of public meetings.

The basic proposal aired at these public meetings was to divide the state into three hunting zones and limit hunters to one zone for the entire season as well as have different hunting periods for each zone. Details included short early seasons, longer late seasons, mid-week openings, and half-day hunting options. A 16-day season for the northern one-third of the state was also suggested. No one option was recommended, but the wildlife management staff was encouraged to stress that change was needed to improve hunting quality.

Harry Libby of the bureau staff later remarked, "The effort to change the deer season was a bloody lesson for wildlife managers of the power behind the word tradition."

The public's response was overwhelmingly negative, and newspapers accounts used descriptors like "pandemonium" and "catastrophic" to capture the public's mood. Most wildlife managers reported the meetings were mob-like and very unruly. The following meeting quotes were typical:

- "It stinks! There's nothing wrong with the present system."
- "Build a fence around the state and make it a zoo and have landowners charge admission."
- "Have DNR run around in the woods dressed like deer."
- "If the DNR intends to screw up deer hunting, all private landowners will post their land!"

Longtime outdoor writer Jay Reed wrote about a Milwaukee meeting attended by some 500 people that typified the 50 meetings held around the state:

The shouting, jeering, cursing hunters filled the air with crumpled copies of a printed questionnaire that DNR officials hoped to have filled out by each person attending the meeting. The crowd's hostility toward the proposals was evident from the moment the meeting opened. As each phase of the program was outlined by Tom Becker, the DNR game manager from Racine, the audience booed and jeered and interrupted.

Keener presented the results of the meetings to the Natural Resources Board at the end of October. The proposal was defeated, with more than 10,000 of 11,500 (88%) voting it down. Keener acknowledged the proposal's defeat but remained committed to studying the hunting quality issue. He recommended working on alternatives with the Conservation Congress and launching a public relations campaign to "explain deer management and give the public a foundation on which to build a sound, ethical, quality deer season in Wisconsin." Harry Libby of the bureau staff later remarked, "The effort to change the deer season was a bloody lesson for wildlife managers of the power behind the word *tradition*."

Continuing Biopolitics

The Conservation Congress process for determining final deer quotas continued to follow the same conservative pattern throughout the 1970s and into the 1980s. Bill Murphy seemed to relish the controversy caused by the annual disagreements over deer harvest quotas and was thought to purposely generate publicity on the subject because it generated good public hearing attendance. It also elevated his importance in the view of its members because delegates liked to hear him lambaste the DNR. The Conservation Congress big game chair was also elevated in status among the delegates.

In Murphy's home county, Columbia, the combative style he used against the local game manager mirrored what he displayed at statewide meetings. Game managers Therm Deerwester and Dan Owen were publicly chastised and embarrassed at regular intervals. I recall one particularly brutal barrage from Murphy at a District Conservation Congress session (about 1970) at which Murphy was irate over Deerwester's

Biopolitics

Biological decision making influenced by the political process or by individual politicians, sometimes disregarding biology.



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supposed failure to do the job as requested by the people paying his salary... the Wisconsin sportsmen. After a long speech by Murphy accusing the DNR of ignoring its “employer,” Deerwester was asked to respond. He stood up at his chair and said to the group, “I work for the wildlife of Wisconsin and do what is best for them. I don’t have to cater to you on biological issues you don’t understand.”

I also recall a 1972 district Conservation Congress meeting that clearly demonstrated Bill Murphy’s impact on the deer quota process. I was the local game manager representing Grant, Richland, Sauk, and Iowa counties. I had met with each of the county representatives in advance of the district meeting—as did my peers in the other counties of this district. I explained deer kill histories and the mathematics involved for each deer management unit involving variable quotas. Because the delegates personally saw facts and figures producing quota recommendations, all of them endorsed the department’s antlerless harvest recommendations.

When Murphy opened the topic for discussion, he asked for the expected areas of disagreement first. When no one responded, he seemed perturbed and chastised the group to speak out. One brave delegate finally stood up and explained that they had no disagreement. In the process of grilling the delegate, Murphy discovered that while they had complete agreement on the kill level, some delegates did not have a clear understanding how that figure was expanded to determine the number of permits to be issued. Rather than reviewing the procedure so everyone fully understood how the permit numbers were determined, Murphy used the opportunity to accuse the department of purposely trying to mislead the delegates, criticized the attending game managers, and ended the meeting without resolve intending to “take it up at the statewide meeting where they would ask the DNR secretary to reduce the quota.”

In 1972, Jon Bergquist became the Columbia County game manager followed by Pat Kaiser in 1976. Both received the same derogatory treatment by Murphy. Both men were soft spoken and very polite, so Murphy’s criticism was quite difficult for them to counter. One of the worst examples of Murphy’s demeaning treatment of the local game manager occurred in 1983. The topic was deer quotas in Deer Management Unit 70E, northwest Columbia County, and southwest Marquette County. Deer numbers in Unit 70E were quite high, and Murphy fought Kaiser at every step that was aimed at reducing the herd. In 1983, agricultural damage caused Kaiser to issue three deer shooting permits in May and June for unlimited deer killing by the landowner until September. Murphy became so angry over this issue that he wrote two separate letters to Secretary Besadny accusing Kaiser of being irresponsible and incompetent. When Kaiser defended himself by responding with overwhelming biological evidence backed by landowner petitions for higher harvest and suggesting an attorney should not dictate biology, Murphy demanded that Besadny fire Kaiser.

While game managers were not happy about this form of biopolitics on deer harvest quotas, Keener was livid over it. He was particularly disturbed when Murphy would demand that quotas be modified or some consequence would materialize. Murphy’s usual ploy was to say the Conservation Congress would not support the next license increase unless deer quota concessions occurred. While the agency staff including the DNR secretary abhorred Murphy’s conniving on this point, it did influence deer quota negotiations.

New Strategy

Keener, Klepinger, Haberland, and the deer research staff mulled over the deer quota problem from the early 1970s until 1983 before a solution materialized. Antlerless deer harvest quotas were presented to the Conservation Congress during the annual April public hearings *as a matter of courtesy* since it was not an administrative rule. This meant the entire discussion with the Conservation Congress was a policy matter. Since eliminating the topic was out of the question because of long tradition and keen interest, Keener decided to formalize a key element of the quota formula into an administrative rule.

The key element was listing the over-winter deer management goals by deer management unit. The idea was that deciding how many deer should be carried over

winter was a legitimate public concern assuming the biological limit was reasonable. Once the public agreed to a figure for each unit (for example, 15 deer per square mile of deer range) through the public hearing process, that figure was established as an administrative rule through the public hearing process. It would not come up for public hearing again unless the over-winter goal was proposed for change. It then was simple math to calculate the antlerless harvest level each year to maintain that over-winter goal. The calculations did not require public review through legal hearings.

Keener anticipated that once over-winter goals were codified (legislatively approved and published) in the administrative rules, over time and with Conservation Congress confidence building with a successful deer program, the bureau staff would see the day when harvest and permit levels would not have to be debated. Ideally, they would not even be on the Conservation Congress agenda for discussion.

Over-winter deer population goals listed by unit were finally established by administrative rule in 1984. However, the Conservation Congress debate over permit levels simply shifted to the method the DNR used to estimate deer populations (the SAK system). This debate focus by the Conservation Congress became a new barrier to good will and credibility between the two factions.

Car-Deer Collisions

Car-killed deer numbers exploded again in the 1970s consistent with the growth in the state deer herd. The 11,688 dead deer picked up in 1970 doubled in number by 1980 and surpassed 30,000 by 1984. Warden expenses relating to picking up and disposing of car-kills and the enormous time committed to those tasks led to contracting these services with private vendors.

Black Bear Management

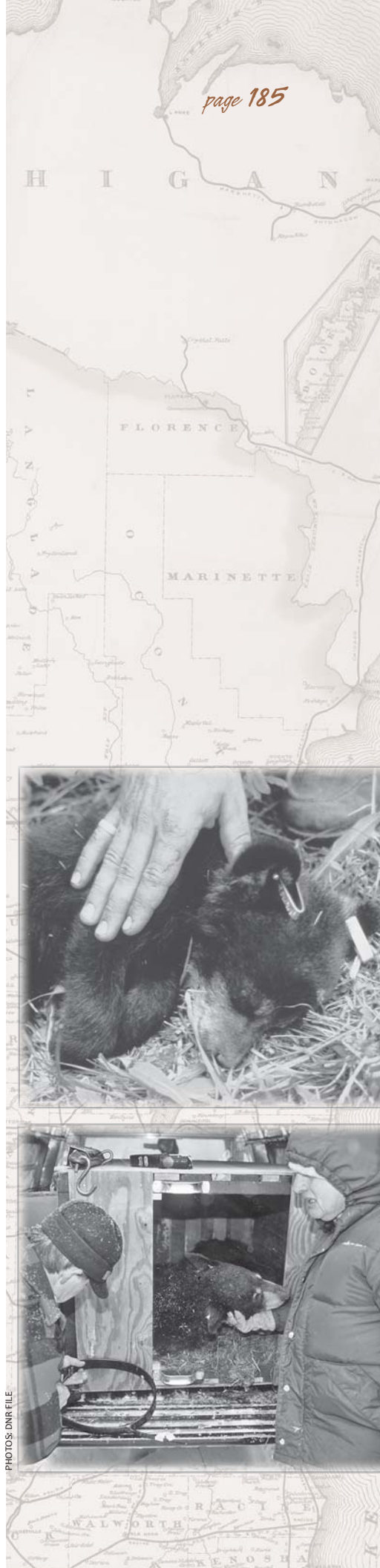
Black bears are very common over much of northern Wisconsin, and their range expanded into the central part of the state during this time period. Unprotected prior to 1930, it wasn't until registration was required in 1956 that they began to attract more attention. Trapping was outlawed in 1957, and a longtime ban on the use of hounds for bear hunting was lifted in 1963. Cubs became protected from hunting in 1965, and the standard bag limit of one adult (yearling or older) bear per year was established.

In the early years, bear hunting success was associated with accidental harvest by deer hunters. Few hunters actually pursued bear independent from deer hunting because the small population was spread throughout the north, and the animals were too stealthy for most hunter abilities. When unethical bear shooting in dens became an issue in 1975, bear hunting was closed during the deer season. Baiting and dog use became the standard harvest methods since that time.

Wisconsin's largest carnivore could be killed under the authority of a small game license from 1930 until 1973. When it was included under a separate hunting license in 1974, the effect was to elevate the animal to "big game" status. That license requirement produced a marked change in hunting interest in the animal. Bear licenses almost tripled from 1974 to 1980. Equally as impressive, the bear harvest for 1980 to 1984 almost doubled that of the 1973 to 1979 period.

The pre-hunt bear population goal was around 4,000 for many years, enabling an annual harvest of between 200 to 600 bear from 1956 through 1968. Into the 1970s, the harvest ranged from 400 to 800, and the population goal was increased to 5,500 because of expanding range. The bear harvest jumped to 1,243 in 1981. While concerned, researchers felt it was likely an isolated high harvest. However, when the fall kill increased again the next year to 1,433, alternatives to reduce future harvests were explored.

Bear hunting methods were a very controversial subject among bear hunters themselves. The two main factions were "bait sitters" and "dog men," although some were both. Those favoring baiting liked to place some form of bait (liquid scent, bakery goods, meat, etc.) in the woods in advance of the season and then hunt that site, usually from a tree, during the season. Several baiting sites were commonly maintained



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throughout the bear hunting season. Dog men usually put a single dog out to find a fresh bear trail and then released several more dogs to chase the bear until it was up a tree (“treed bear”).

Both bear hunting techniques were effective, but conflicts were inevitable. Dogs ran through bait stations, disturbing the site and scaring off the bear. Sometimes the bear was treed and shot, thereby robbing the bait sitter of “his bear.” Hunters using dogs claimed their method was more sporting because the bear had a chance to elude the dogs. They also were very prideful that the dog itself added a special enjoyment to the hunting experience. They chided their rivals that it took no skill to sit in a tree and waiting for a bear to find a garbage pile.

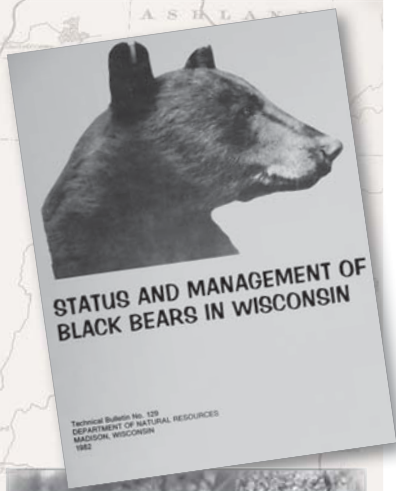
Bait sitters countered the view of dog supporters by claiming they observed more of nature because of their quiet hunting style and that they were pitting their individual skills against the bear, not driving around in their trucks listening for dogs to “bark tree.” Besides, dogs commonly trespassed on private lands and stirred up complaints about bear hunters in general. The controversy was resolved in 1975 by establishing separate seasons for each method.

Research biologist Bruce Kohn was in charge of DNR bear research in the 1970s and 1980s. He examined data on 2,699 bears between 1973 and 1979 and dramatically increased the agency’s knowledge about bears and their habitat. The extensive information he accumulated was published in 1982 as Technical Bulletin 129, *The Status and Management of Black Bears in Wisconsin*.

About 1983, Kohn used data assembled from aging information collected by University of Wisconsin-Stevens Point researchers, ear tag returns from nuisance bear trapping, and bait station monitoring trends to produce an innovative population model. The model demonstrated that recent harvest trends would reduce the population below the 5,500 goal and even threaten the DNR’s ability to maintain a viable bear population in the future.

The initial management need was to establish statutory authority for the DNR to control bear hunting by using a permit system similar to that used for deer hunting. Introduced in the Legislature in 1983, the law drew so much opposition from the Conservation Congress and bear hunters that the proposal died in committee. As a result, the agency proposed delaying the season opening by two weeks, hoping that bears would be less active then and, therefore, less vulnerable to hunting. Again, the Conservation Congress objected, but a compromise of a one-week delay was supported.

The 1983 bear harvest was 934, an encouraging reduction, but still too high for stabilizing the bear population according to Kohn’s population model. The DNR staff



R. QUEEN

Research biologist Bruce Kohn (left) and wildlife manager Ned Norton with a Wisconsin black bear.



DNR FILE

increased their efforts to present more data to the public, and the Conservation Congress aimed at educating them on the need for additional changes. Plans were made to pursue hunter control legislation as soon as the wildlife and research personnel felt the public was ready.



Waterfowl Management

The waterfowl management program began to receive more attention during the Keener administration because he was personally interested in this resource. His participation as Wisconsin's official representative on the Mississippi Flyway Council did much to elevate Wisconsin's reputation nationally. Canada goose populations and harvest quotas were hot topics.

Canada goose populations and harvest quotas were controversial topics primarily because southern states in the 14-state Mississippi Flyway wanted a larger share of the kill. Since the birds migrate through Wisconsin, Minnesota, and Michigan first, these states have some hunting advantage. Further, if the state's management program tended to keep the geese in the state longer, hunters tended to shoot more. This situation caused the Flyway Council debates to get rather heated.

The good news was that despite the far-from-perfect system, the resource was managed in a reasonably uniform, scientifically based manner thanks to waterfowl biologists like Dick Hunt who kept research facts in front of the decision makers. Goose and duck populations generally fared well over time, and harvest controls ultimately became adequate for distributing recreational opportunity in a manner pleasing to most participants.

Duck Management

The number of duck hunters in the state peaked at about 146,000 in 1975, third highest number in the Mississippi Flyway, but steadily declined to around 88,000 by 1984. Duck harvests in the Mississippi Flyway exceeded five million between 1969 and 1984, with Wisconsin's portion ranging from a high of over 720,000 in 1975 to a low of about 400,000 in 1982. The average daily bag per hunter was only 0.5 ducks for the last 20 years.

Wisconsin's own duck production consisted primarily of mallards, blue-winged teal, and wood ducks. The numbers produced were significant and contributed heavily to the early season (October) duck harvest. Ranging from 250,000 to more than 500,000 breeding ducks, the state was adding more ducks to the Mississippi Flyway than it was removing.

Management in Wisconsin continued to emphasize flowage development, upland nesting cover, refuges, and seasonal closed areas. Prescribed burning impacted thousands of acres per year and represented the most cost effective management tool for maintaining the productivity of grasslands. The bureaucratic process for getting the work done, however, was very time consuming and frustrating for wildlife managers. Planning, budgeting, permits, engineering, equipment coordination, contracts, scheduling, and environmental impact studies reduced the number of these projects by the 1980s.

One of the early issues facing John Keener, wildlife managers, and wardens was the longtime concern that compliance to conventional duck hunting bag limits was difficult for hunters because they needed to identify their target by species *before* they shot. Small birds, flying fast in poor light, test the skill of even the most experienced biologist let alone hunters with limited duck-identification training. The federal solution to this problem came in the form of a "point system" in 1970.

The point system assigned point values to individual species of waterfowl. The daily bag limit was achieved when point value of the last duck shot added to the point value of the other ducks in the bag reached or exceeded 100 points. The purpose was to allow hunters to kill more of the abundant species and fewer of the less abundant species. The point system idea actually came from Midwest duck hunters commenting on the annual regulations framework.

Mississippi Flyway Council

The Mississippi Flyway Council is an administrative advisor to the U.S. Fish and Wildlife Service (FWS) and is composed of state wildlife administrators from Wisconsin, Illinois, Michigan, Minnesota, Iowa, Indiana, Ohio, Missouri, Arkansas, Alabama, Tennessee, Kentucky, Louisiana, and Mississippi as well as representatives from the Canadian provinces of Ontario, Manitoba, and Saskatchewan. FWS and Canadian Wildlife Service (CWS) employees also participate in Mississippi Flyway Council meetings but are non-voting members of the group. The Flyway Council's annual deliberations assist the FWS in assessing waterfowl populations and establishing fall hunting seasons.

The Mississippi Flyway Council contains a Technical Section composed of biologists from the representative states, Canadian provinces, FWS, and CWS. Research biologist Dick Hunt was Wisconsin's representative during this time period. The section's role was intended to be purely scientific in nature. That is, they were to study the species being managed, learning all they could about things like reproduction, life cycles, feeding habits, mortality factors, migration, winter range, fall population levels, and management plans. They reported results and recommendations to the Flyway Council. The Council, in turn, would evaluate the recommendations and make a uniform proposal to the FWS.

Sociology and politics, or "biopolitics," is built into the flyway council system as a natural occurrence in a bureaucratically based procedure. Just a cursory look at the system explains why biopolitics exists. Bureaucrats administer federal law, a political process in itself. Each participating state has its own politics, management goals, and objectives. The science is far from exact. Participating individuals have their own knowledge, experience, and egos. The hunters paying the bills want their own needs met. The results are no surprise: a complicated, debate-laden procedure heavily influenced by funding and vociferous leaders.

The Gamekeepers

In the first year of the system (1970), the following point values were assigned:

- 100 points: Canvasback and redhead
- 90 points: Hen mallard, wood duck, hooded merganser
- 15 points: Blue-winged and green-winged teal, scaup, wigeon, shoveler, gadwall, and mergansers except hooded
- 25 points: All other ducks

Some bag limit examples under the new system illustrate how points were applied. If a hunter shot a canvasback or a redhead as the first duck in the bag (100 points), he or she was done for the day. If the hunter shot only blue-winged teal (15 points each), he or she could shoot six of them and still shoot one more of any species (including a high point duck) before the daily bag was reached. Obviously, the order in which the ducks were shot became important for compliance.

The FWS dropped the point system requirement after a few years because their harvest analysis did not demonstrate that the point system was shifting harvest pressure from one species to another as it originally had hoped.

The point system was confusing to hunters in the beginning, but they quickly learned how it worked, and most liked it. Duck identification for determining bag limits was easier because most of the time they could shoot first and identify the bagged game in their hand. Game managers and wardens had to improve their skills in identifying ducks along with hunters. Eventually, the department conducted duck identification clinics annually, and they continued the practice well into the 1980s.

The FWS dropped the point system requirement after a few years because their harvest analysis did not demonstrate that the point system was shifting harvest pressure from one species to another as it originally had hoped. Further, they found that duck hunters were commonly “reordering” their kill so they could hunt longer each trip. In other words, the system was encouraging hunters to violate the law. Individual states, however, were still allowed to use the point system, and Wisconsin chose that option.

Biologist Dick Hunt observed that some wardens were so bad at proper duck identification that “they were afraid to go into the marsh!” He discussed duck identification ideas with the Horicon Area warden, Tom Harelson. Harelson agreed with the need and organized warden training clinics to address the problem. Hunt participated using preserved species mounted on sticks for ease of handling. This “duck on a stick” technique was very effective and enabled wardens to easily develop expertise.

Dick Hunt also organized annual group sessions for the FWS at the Poynette Game Farm to identify, age, and sex duck wings sent in by Wisconsin hunters as part of a comprehensive federal survey system. Called “wing bees,” the sessions not only provided excellent management information on ducks but enabled wildlife managers and wardens from all over the state to meet each other. After several years, the wing bee sessions were moved to Southern Illinois University.

Waterfowl habitat projects were funded using the state waterfowl hunting stamp, after the law was created in 1978 and generated hundreds of thousands of dollars annually in Wisconsin. Wildlife managers statewide soon developed expertise in designing wetland improvement projects to compete for those funds during each budget cycle. The resultant habitat preservation and enhancement produced numerous benefits for wetland dependent wildlife.

Canada Goose Management

The annual “Goose Wars” continued from the early 1960s. Goose numbers at Horicon Marsh had generally stabilized, but in excess of 100,000 feeding geese were still causing crop damage, and landowners complained vehemently on a regular basis. Law compliance was also an issue, and special warden teams faced a high-level violation



A Change of Focus, 1969-1984

rate each fall. Illegal harvest (primarily over-bagging) contributed to higher harvests and aggravated southern states in the Mississippi Flyway. This resulted in lower Wisconsin harvest quotas that, in turn, aggravated Wisconsin hunters.

Keener handled most waterfowl-related issues until Ronald Nicotera joined the staff in 1974 when the “waterfowl and nongame specialist” position was created, and program priorities for this function shifted. Keener continued to participate in waterfowl-related issues with Nicotera, but Nicotera was charged with establishing the bureau’s role in endangered and nongame species management.

As controversy continued into the 1970s, a group called the Citizen’s Natural Resources Association (CNRA) was formed, composed of landowners, hunters, bird watchers, and interested citizens to monitor the state and federal effort and to provide a public forum on the topic. The CNRA soon took on an adversarial role, accusing state and federal governments of mismanaging the goose flock. Their agenda stimulated even more controversy throughout the decade as the DNR struggled with its goose management strategies.

In the early 1970s, over 225,000 of the Mississippi Valley Population (MVP) of Canada geese were concentrated in the Horicon Marsh area, and about 25,000 were using other state wildlife areas. The Horicon goose situation had expanded to become an east central Wisconsin problem, forcing the state and federal governments to redesign their management plan.

The department and the FWS initiated an effort to make all Wisconsin habitats—principally Horicon Marsh National Wildlife Refuge—less attractive to MVP geese in 1976. CNRA immediately sought an injunction to stop the plan based on the state’s failure to file an environmental impact statement (EIS) on the plan. The Court rejected the injunction, finding that a “blanket EIS” on the federal refuge system already on file was adequate. The plan was implemented in 1977, and the results were reported on over the next six years through a series of pamphlets entitled “Goose Watch.”

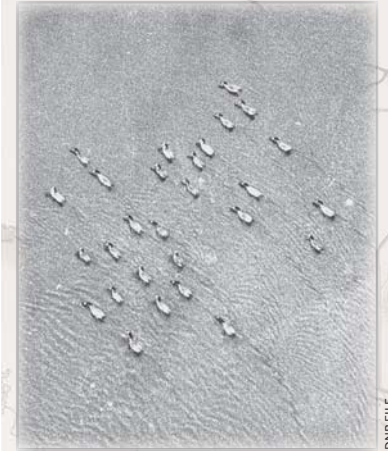
The management plan for east central Wisconsin to reduce the numbers of goose *use-days* in the state combined several techniques. Reducing crop production and converting those lands to fallow fields or nesting areas were identified as essential management steps. Minimizing water areas available for loafing and roosting through draw down procedures allowed cattail invasion to occur and reduced the size of these resting areas. A record drought at the same time contributed significantly to the success of this effort.

The Horicon goose situation had expanded to become an east central Wisconsin problem, forcing the state and federal governments to redesign their management plan.

Geese were hazed in the Horicon National Wildlife Refuge prior to the fall hunting season using helicopters and airboats to distribute them better and stimulate some geese to leave the area. Area landowners received shellcrackers (exploding shotgun shells) and cannon exploders to prevent crop depredation.

The management plan also used hunting seasons to keep geese out of the Horicon Refuge. In addition to the regular shotgun deer season (November) and late archery deer season (December) normally held in the federal refuge, pheasant and rabbit hunting were allowed in October. The state end of the Horicon Marsh complex was opened for duck hunting. Goose hunting permits were increased for the Horicon Zone to harvest more Canada geese.

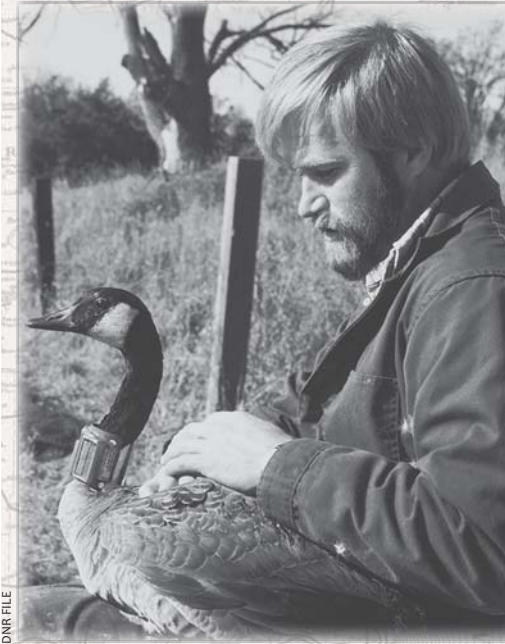
The east central Wisconsin management plan continued through 1980. Regular goose population inventories and a number of research projects measured results in several areas. Distribution, migration, and survival of MVP Canada geese were documented. The University of Wisconsin-Madison’s Department of Agricultural and Applied Economics conducted socio-economic surveys. Disease monitoring was also implemented along with duck studies to monitor impacts on nesting and fall use.



High numbers of Canada geese in the Mississippi Valley Population and their management created controversy.

Use-days

A method of quantifying wildlife use of an area by estimating the number of animals using the area per day and multiplying it by the number of days observed.



Wildlife researcher Gerald Bartelt used radio telemetry to investigate Canada goose movement patterns.

The Gamekeepers

Some, including John Keener, thought the plan was successful. Goose numbers were reduced at Horicon Marsh National Wildlife Refuge and more evenly distributed around the state. Crop depredations were reduced and landowner relations improved. Hunting quality was believed to have been improved because of increased harvest quotas, a better permit system, and landowner cooperation.

Others, including Dick Hunt, thought that the plan was not well thought out and that it erroneously allowed Illinois and Wisconsin to over-shoot the MVP flock. A long-term goose population decline was occurring, and the MVP winter population was reduced from the 575,000 obtained in 1977. Nonetheless, Wisconsin and Illinois sought and received a harvest quota of 50,000 each for 1978. The fact that this parity was based on negotiations between the wildlife directors of the two states and not biologically based was a concern of many wildlife managers. The winter MVP population slipped further to 434,000.

In 1979, the Mississippi Flyway Council and FWS developed an action plan designed to reestablish the traditional winter range for the MVP population of Canada geese. The primary goal of the plan was to increase the flock by 15% each year until 1983 with two other objectives by December 31 of each year:

1. Distribute at least 200,000 geese south of the 36th parallel (an east-west line through northern Arkansas)
2. North of the 36th parallel, achieve a Canada goose population of not more than the 1974–78 average (387,000 geese)

The harvest quota for Wisconsin and Illinois was reduced to 38,000 each for 1979. The winter MVP count recorded 395,000 geese. By the fall of 1980, it appeared that the 1976 planning target for Wisconsin had been achieved. Geese were moving south through the Mississippi Flyway earlier. The Horicon flock had been reduced with larger numbers appearing at satellite areas. East central Wisconsin was accommodating the planned number of geese.

Wisconsin extended its goose planning efforts by designing yet another plan to cover the 1981 to 1990 period. With Conservation Congress endorsement and Natural Resources Board approval, the plan identified four primary objectives:

1. Accommodate 175,000 geese (peak count) in east central Wisconsin by 1990 with no more than 75,000 on the Horicon National Wildlife Refuge and an annual harvest of 30,000–35,000 geese.
2. Monitor and maintain harvests within the annual MVP quota (by requiring permits and kill reporting in a 16-county area).
3. Provide improved hunting conditions on state goose areas and surrounding private land by 1990.
4. Place increased emphasis on efforts to gain public understanding of Wisconsin's goose management program through a coordinated information and education program.

Stuff hit the fan when the FWS announced the 1981 goose harvest quota assignments. To achieve the 15% population growth objective, the combined Wisconsin-Illinois quota had to be 63,000. Wisconsin proposed to reduce the quota to 53,000 with a 28,000–25,000 split in favor of Illinois. Illinois threatened that unless their quota share was at least 33,000, they would drop out of the planning process. The southern states caved into Illinois' demands, leaving Wisconsin with a meager goose allotment of 20,000.

Reduced goose harvest quotas and shorter seasons became the norm for Wisconsin through 1984. The Canada goose season length was reduced from 50 days in 1981 to 25 days in 1984 along with reduced harvest quotas. The Conservation Congress and state waterfowlers expressed their anger about the situation but to no avail.

Keener stressed that new research findings clearly showed that a distinct sub-population had an affinity for east central Wisconsin and warranted separate management within the MVP. Parity with Illinois no longer appeared justified. At the same



Owen Gromme calling geese with a call that he made, Horicon Marsh, 1967.

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time, federal surveys indicated that Wisconsin had been significantly exceeding their assigned quotas and that poor goose production contributed to the current situation. Future regulations needed to address tighter goose harvest control in the state.

Pheasant Management

The ring-necked pheasant population had been decreasing since the 1950s with no solution in sight. Researchers and wildlife managers were very aware that Wisconsin was on the northern fringe of the pheasants' range, but high wild populations in nearby Iowa gave hope that Wisconsin could produce more birds.

Habitat seemed to be the key to pheasant abundance. The Soil Bank Program, which had begun in the 1950s, boosted production significantly, and for a few years, Wisconsin hunters enjoyed great fall success. Research on habitat completed by John Gates in east central Wisconsin and continued by Ed Frank, LeRoy Petersen, and Gene Woehler on the Waterloo Wildlife Area improved the manager's toolbox but didn't seem to be enough. When the Waterloo research ended in 1974, large blocks of dense nesting cover became the management standard of the day, but the pheasant population continued to drop.

Pheasant stocking remained the backbone of the program, but increasing costs, gene pool concerns, disease, and anti-stocking sentiments stimulated the wildlife management staff to search for alternatives. In the interim, the Poynette Game Farm continued to raise and release some 50,000 adult roosters for fall release on public lands.

A wildlife disease that erupted at the Poynette Game Farm in 1981 ironically had a positive long-term effect on the program. Disease contingency plans as well as strict sanitary procedures protected pheasants as well as humans from inadvertent exposure to disease. Vehicle traffic was no longer allowed to pass through the facility. Entry to buildings and pens was restricted, and authorized staff members were sanitized prior to entry. Bird mortality losses were dramatically reduced.

The Poynette Game Farm received a major face-lift in 1982. Disease concerns and deterioration of the original pens and brooder facilities were reducing production capabilities. Serious consideration was given to ending the operation completely. Ultimately, \$1.2 million was budgeted for an indoor breeding facility, large scale brooding units, and reconstruction of 60 outdoor range pens. After the construction, pheasant production reached 74,000 birds using an annual game farm budget of \$400,000.

Wild Turkey Management

Attempts to reestablish wild turkey populations in Wisconsin had failed since the turn of the century. What happened after 1974 became one of Wisconsin's best wildlife success stories (details in Chapter 11). The restoration of the wild turkey on the Wisconsin landscape involved many individuals. Renewed interest came in the early 1970s when farm game program leader Edward Frank, stimulated by the wild turkey reintroduction success of Iowa and Minnesota, met with game managers to discuss program direction. A memorandum from game manager Carl Batha suggested that turkey stock needed to be taken from the wild and that Missouri would be a good source. John Keener picked up on that idea and brought the topic up to his Missouri friends at a Mississippi Flyway Council meeting.

A memorandum from game manager Carl Batha suggested that turkey stock needed to be taken from the wild and that Missouri would be a good source.

What made the planning and ideas turn into a meaningful, successful program was the ability of wildlife biologist Ron Nicklaus to shift his priorities from Mississippi River waterfowl management to full-time focus on wild turkey reintroductions, assisted by wildlife technician John Nelson. Establishing trapping expertise, range assessment, landowner contacts, publicity, establishing a hunter education program,



Pheasant management relied on the establishment of dense nesting cover.



The Gamekeepers

National Wild Turkey Federation coordination, and long, uncompensated hours was the norm for Nicklaus and Nelson for several years.

From a small release of 45 Missouri wild turkeys in Vernon County in 1976 to the first spring turkey hunt in 1983, wildlife management came a long way. But it was not by accident. It involved the ingenuity of a few key individuals and the labor-intensive efforts of a handful of very dedicated wildlife managers, technicians, and LTEs to pull it off. No one in their wildest imagination could have foreseen the greater success yet to come.

Muskrat Management

By this time, the Horicon Marsh management system involving the share-trapping program, which had been initiated in 1943, was almost a ghost program because it generated so little interest and notoriety. It was, however, an effective program for maintaining good waterfowl habitat. The muskrat season length continued to vary from 70 to 188 days, and the harvest fluctuated from a low of 2,100 to a high approaching 13,000 muskrats. Nine to 22 trappers competed for 20 trapping units, and fur prices became as high as \$5.36 per pelt in the 1979–80 season. A youth trapping program was introduced in 1978 as a way of attracting the younger generation to the sport of trapping.

Dove Hunting

John Keener's passion for hunting mourning doves kept the subject alive even though the concept was very volatile with the public. He tried another hunting season proposal in 1970, but the Natural Resources Board firmly rejected it. Keener was successful, however, in obtaining board endorsement of an ad hoc committee to study the proposal and put together a six-member committee composed of representatives from the Conservation Congress, National Audubon Society, University of Wisconsin, and the Bureau of Research. After several months of deliberations, Keener reported back to the board at its January 1971 meeting. The committee members could not strike a compromise between hunters and non-hunters or endorse a hunting season, so Keener recommended that "no further action be taken at this time."

In the meantime, publicity on potential mourning dove hunting and the Wisconsin DNR attempts to pursue hunting was producing a barrage of opposition letters to the Legislature as well as the Conservation Congress. Bill Murphy was quoted in the newspapers that he had received so much mail opposing future dove hunting that his organization was dropping the idea. To cement that position, Senator Reuben LaFave, a Republican from Oconto, was successful in getting a bill passed making the mourning dove the "state bird of peace."

LaFave received much favorable publicity for his bill authorship. When it passed both houses of the Legislature with little opposition, he was quoted in several newspapers stating, "This new law will save the mourning dove from extinction." While the new law put a damper on the dove hunting proposal for a long time, the idea was far from forgotten.

Other Programs

Wildlife management work throughout the Keener era continued to get more complex and time consuming as more programs were added by the Legislature, DNR administration, and wildlife manager initiatives. Despite comprehensive planning guidelines and clear recognition that staff workloads were full and budgets strained, the constant urge to do more and better things for wildlife seemed to drive the program to add-on after *add-on*.

Some program add-ons slipped in simply because they were very positive in image and took little effort to implement. *Acres for Wildlife*, initiated in 1976, met those criteria. On the other hand, falconry, a sport with very low participation rates (about 120 individuals) added significant workload in 1976. Wildlife managers and wardens had to learn new rules, create myriad new forms, administer qualifying tests, answer countless inquiries, inspect facilities/properties, keep records, and monitor program progress.

Add-on

An unanticipated work task created after normal work schedules have been filled. The work is accommodated by either working extra hours, reducing the time spent on some or all of the previously scheduled work, or dropping some lower priority work to achieve results.

Acres for Wildlife

A national program initiated in Wisconsin by the DNR's Bureau of Wildlife Management in 1977–78 to promote protecting and enhancing wildlife habitat on private lands. Landowners signing up for the program received signs for posting the acreage dedicated to wildlife and an arm patch to acknowledge their participation.

Wildlife Health

Waterfowl management got more complicated in the 1970s and 1980s when disease outbreaks became more significant than ever before. Avian cholera, duck plague, and botulism were showing up all over the United States, and wildlife professionals were concerned that more outbreaks were inevitable. Technical help for wildlife managers dealing with the problem in the field either came from the University of Wisconsin-Madison's Department of Poultry Science or the state-run Animal Health Laboratory, then on Mineral Point Road in Madison.

National disease priorities led the FWS to establish a National Wildlife Disease Laboratory in Madison, Wisconsin, in 1981 under the leadership of Dr. Milton Friend.

Botulism has always existed in wild populations, but it usually affected small numbers of birds and passed unnoticed in quiet backwater marshes. A botulism outbreak at Horicon Marsh, however, killed more than 6,000 green-winged teal in September 1978. This *epizootic* was followed by a second outbreak at Horicon in August 1980 that killed more than 1,000 mallards. About 450 wood ducks collected there in August 1983 had the same disease.

Duck plague was diagnosed in eight captive Muscovy ducks in Madison on June 10, 1979. Avian cholera was first detected in Wisconsin at the Poynette Game Farm in November 1979 when 80 pheasants were diagnosed with the disease. Lead poisoning was detected in 850 dead Canada geese collected from Eldorado Marsh Wildlife Area in Fond du Lac County in October 1980.

Other diseases were detected in captive wildlife and in wild populations on a regular basis into the 1980s, including toxicosis, methamidophos, tularemia, salmonellosis, and aspergillosis. Botulism was also detected in several other areas in the state.

National disease priorities led the FWS to establish a National Wildlife Disease Laboratory in Madison, Wisconsin, in 1981 under the leadership of Dr. Milton Friend. It also resulted in the development of the Wisconsin DNR's first wildlife disease emergency planning effort and generated the hiring of the agency's first wildlife disease specialist, Dr. Terry Amundson, in May 1981.

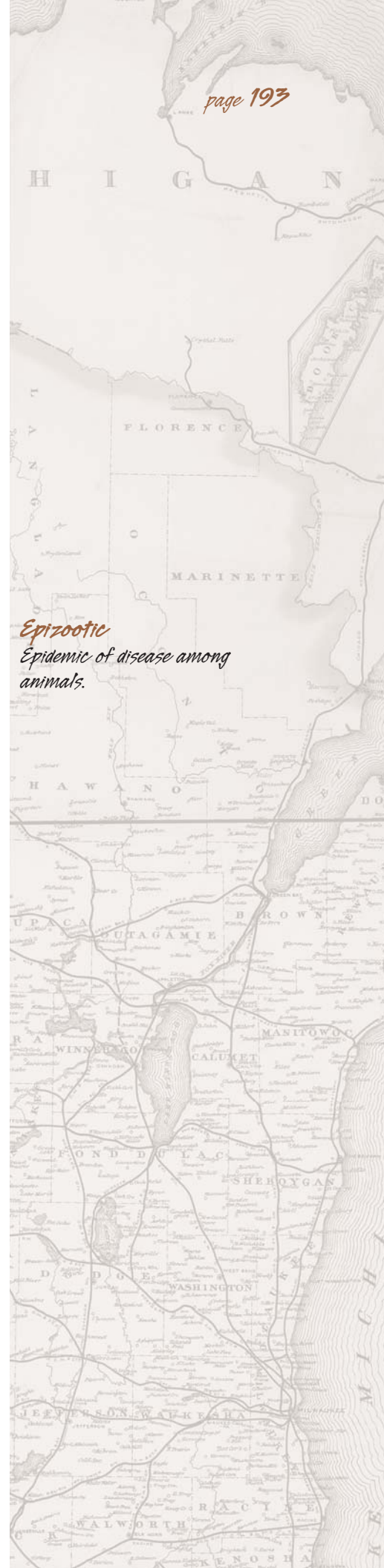
Dr. Amundson's arrival couldn't have been timelier. In June 1981, the Poynette Game Farm began to document pheasant chick losses in their brooder pens that were exceeding the normal level. The farm's newly appointed operational supervisor, Don Bates, and game farm supervisor Lynn Hanson recognized the seriousness of the losses and immediately consulted with the Wisconsin Animal Health Lab in Madison for diagnosis.

The Health Lab quickly diagnosed the bird mortalities as having been caused by multiple bacterial infections and recommended a treatment (nitrofurazone). In the meantime, weekly mortality was approaching 1,000 dead birds. That mortality increased to 1,380 and then 1,440 after treatment was initiated. Dr. Amundson and the health lab reconfirmed the earlier diagnosis but discovered salmonella was also involved. The core medication was changed (bacitracin), but mortality increased to 4,100 birds. Frustrated, health officials continued to examine new carcasses and finally identified two additional diseases and additional treatment needs.

The newly applied medication was effective, and pheasant mortality began to drop. However, by this time losses totaled over 16,000 pheasants, reducing the adult pheasant releases scheduled that fall from 50,000 to 33,000. Outdoor writer Don Johnson picked up the story that summer and interviewed Secretary Besadny about the event. While the problem had been reported through channels to the bureau, the severity was not clear, and the secretary had not been briefed.

When the impact of the Poynette disease outbreak was fully realized, Besadny was very upset, and Keener received three weeks off without pay as a result. Knowing Keener would show up for work anyway, he was barred from using his office the entire

Epizootic
Epidemic of disease among animals.



The Gamekeepers

period. Game farm supervisor Lynn Hanson received only three days off because he had relayed most of the information to his supervisors.

Captive Wildlife

Licenses issued for private game farms, shooting preserves, wildlife exhibits, fur farms, falconry, wildlife rehabilitation, scientific collection, dog trials, and dog training required compliance with a complex series of regulations established by the Bureau of Wildlife Management. Conservation wardens enforced those standards in the field, and some wildlife managers helped with compliance inspections.

Pen standards established to provide safe and sanitary care of wildlife in captivity were found to be inadequate in 1977, and an extensive review of other states' captive wildlife facilities led to modifications in Wisconsin. The review opened up a can of worms. Numerous licensed individuals and several statewide organizations took issue with the new standards. At the same time, wildlife biologists, veterinarians, and wildlife disease specialists became aware of other captive wildlife rule shortcomings that exposed wild populations to risks of genetic harm and disease.

Pen standards ultimately led to administrative rules in 1980 that were reasonably acceptable to everyone. The basic law regulating captive wildlife, however, was discovered to be woefully inadequate. Many of the laws established in the 1930s were still on the books; they provided little or no disease monitoring and allowed frequent disease exposure to wild populations through deliberate and/or inadvertent releases. Some of the laws conflicted with other laws. Archaic law language was as confusing to the user as it was to wildlife managers and wardens. Early meetings conducted between the DNR staff and various license holders produced little results except angry people.

One of the license holders—who was also the owner of a small newspaper—began to write a series of articles in 1980 bashing the Wisconsin DNR on about every topic involving captive wildlife. It soon evolved into an anti-DNR campaign on a broader range of topics varying from Canada goose management to how the agency managed its fleet of airplanes. His tirades expanded to periodic letter writing featuring a B-25 bomber aircraft logo on his letterhead. The B-25 letterhead barrage continued for about three years. In the meantime, meetings and negotiations on captive wildlife law revisions went on without resolve.

(Author's note: I had established a reasonable level of credibility with the key captive wildlife organizations including the Falconry Association, Wisconsin Bird and Game Breeders Association, and the Wisconsin Shooting Preserve Association, so I was very confident law revision was possible in the near future. In fact, when I spoke on the subject at the 1983 Wisconsin Wildlife Society meeting, I told the group that the new law would be in place by the next year. However, the impasse continued, and the work assignment was put on hold. It took 20 more years for the law revision!)

Hunter Ethics Committee

Hunting and trapping ethics got a lot of attention for the next decade, again generating more time-consuming work for wildlife managers and wardens. Anti-hunting groups appearing in New Jersey and other states began to publicize anti-hunting and anti-trapping messages. A television program entitled "The Guns of Autumn" introduced a shocked public to the "sport" of shooting deer, pheasants, and other game in penned enclosures. While this film forever tarnished the game farm and shooting preserve image, it jolted sportsmen all over the country to take a realistic look at their image.

A statewide Hunter Ethics Committee appointed by the Natural Resources Board in 1976 generated recommendations that produced regulations and several new program initiatives for improving hunter and trapper behavior. Ethics became standard educational themes in regulations pamphlets. Project Respect, a publicity program initiated by the Bureau of Wildlife Management in 1977, sought to improve landowner-hunter relationships by providing Project Respect signs to the landowner that encouraged hunters to ask permission before entering the property. Limited funds and staff support time prevented sustained program maintenance, so it faded out after a few years of use.

Dog Training

Facilitated by the Hunting Ethics Committee recommendation “to encourage the training and use of hunting dogs where legally allowed,” Dr. Donald Didcoct and this author developed a dog training handbook and dog training clinic idea that was implemented statewide in 1977. Seven years later, over 7,000 people had participated in the program through the cooperation of the Wisconsin Association of Field Trail Clubs and a myriad of state sportsmen clubs. (The program continued into the new millennium.)

Human Dimensions Studies

Throughout the agency’s history, traditional research focused on learning more about natural resources. That focus seemed adequate during the time when the department depended mostly on its professionals to solve regulatory-based problems. However, as the public interest grew in intensity in the 1970s and controversy became commonplace, sociologists began to be consulted nationwide for guidance on fish and game issues.

During the late 1970s, the University of Wisconsin-Madison’s Department of Sociology embarked on long-term studies in cooperation with the DNR to learn more about human behavior in natural resources. Dr. Tom Heberlein at the university became a regular consultant for the bureaus of Wildlife Management and Research on assessing hunting quality and developing strategies for addressing controversial hunting proposals. Heberlein conducted a number of behavioral studies on deer and Canada goose hunting that proved most helpful in implementing new regulations critical for those respective management programs. His pioneering guidance ultimately led to the Wisconsin DNR’s hiring of full-time sociologists Edward Nelson and Jordon Petchenik who expanded human dimension counseling for most agency programs.

Wildlife Education

In 1980, the Northwest District hired a manager at the Crex Meadows Wildlife Area who received a very unusual title. James Hoefler was hired in October as an “interpretive wildlife manager” in anticipation that he would spend an unusual amount of time on naturalist and educator duties because of the large number of public visitors at the facility. Some controversy was generated between the district and the bureau about this unusual time commitment away from normal manager duties, but the district prevailed.

Staffer Chuck Pils was successful in coordinating a statewide “Wisconsin Cooperative Trapper Education Program” in 1981. Modeled after the Law Enforcement Bureau’s nationally acclaimed Hunter Education Program, the program relied on volunteer instructors who used the DNR-developed handbook and materials to teach trapping techniques, safety, regulation compliance, and critical ethic standards. This program was crucial to counter anti-trapping movements that were materializing throughout the country and lawsuits in Wisconsin to halt otter trapping. Pils developed outstanding rapport with the Wisconsin Trappers Association and should be credited with bolstering the positive image of Wisconsin furbearer management programs through positive educational efforts.

I received a buck-slip (agency note) in the fall of 1983 from area supervisor Steve Miller suggesting that someone look into a promising new national wildlife education program called *Project WILD*. Keener endorsed the idea and directed me to investigate.



PHOTOS: DNR FILE



PHOTOS: DNR FILE



DNR FILE

The Gamekeepers

I enlisted the support of an Information and Education Bureau staffer Joel Stone to assist me in analyzing *Project WILD* (Joel had been my assistant when I was the area game manager in Madison). After researching the subject, we proposed a five-year experimental program to the Natural Resources Board and launched what I believe is one of the most effective wildlife education programs ever introduced in the state.

Wildlife Reintroductions

The last reported sighting of an American marten (formerly pine marten) in Wisconsin was in 1939. Three attempts to reintroduce martens through stocking were tried in the early 1950s in the north central forest and the Apostle Islands but were not successful. The American marten was officially classified as endangered in the state in 1972.

The U.S. Forest Service (USFS) endorsed and provided major funding for the reintroduction of American martens in the Nicolet National Forest in 1975. USFS biologist Larry Martoglio and DNR district wildlife specialist Arlyn Loomans coordinated the capture of wild martens in Ontario and Colorado and their transfer to Wisconsin. Assistant area wildlife manager Phil Vanderschaegen helped with the handling and release of the animals.

Rule Processing

The administrative rule process is a very complex task assigned to one specialist working in each DNR bureau impacted by Administrative Rules. Following supportive public input by way of public hearings, legal petitions, Natural Resources Board requests, and legislative endorsements or the Conservation Congress process, the requested rule is thoroughly reviewed by DNR staff, and if found needed, the appropriate rule or rules is sent to the bureau most impacted by the proposal for rule drafting.

All game related hunting and trapping regulations are drafted by a "rules drafter" in the Bureau of Wildlife Management. A specific, legal format provided by the Revisor of Statutes must be followed to publish the rule properly in the Wisconsin Administrative Code, a specific regulations series authorized by law for certain state agencies. This format requires the drafter to decide to create (draft new), repeal (delete), repeal and recreate (delete and draft new), renumber (change Code location) or amend (change part) of all code sections necessary to implement the change correctly.

After the rule is drafted, since any missing punctuation, ambiguous word, or poor phrase could change the meaning of the rule, it is routinely sent to a DNR attorney and the Bureau of Law Enforcement for review to ensure that the text is correct, the rule implements what was intended, and that it is enforceable (wardens are able to clearly detect a violation and prosecute successfully in court).

The resultant administrative rule is transmitted to the DNR secretary for approval and is scheduled for Natural Resources Board approval to present the rule at public hearings. Often, the rule drafter presents the rule to the board and explains the rule's origin and its rationale. If approved, the rule is presented at a minimum of one public hearing but often at several hearings around the state. In the case of annual fish and game hearings, the hearings are held in all of Wisconsin's 72 counties.

The DNR staff reviews all comments and opinions recorded at the public hearing, and any warranted rule modifications are sent to the rules drafter for revision. Following attorney and law enforcement endorsement, the rules are again sent to the secretary for approval and scheduled for final Natural Resources Board approval. If approved, the rule proceeds through another review process involving the Legislative Council Rules Clearinghouse, which screens legality and format, and a public hearing by a legislative committee that has natural resources oversight responsibilities.

Rules that are not approved by this process are sent back to the agency for rejection or modification. Once approved by the legislative committee, the rules are published in the Administrative Register, the official publication produced by the Revisor of Statutes, and the rule becomes effective. All conservation wardens, park rangers, and personnel in charge of keeping Administrative Code books up-to-date receive copies of the new rules by an automated mailing system. The Wisconsin Legislative Council Rules Clearinghouse maintains an historical listing of all administrative rules established by state agencies (www.legis.state.wi.us/lc/).

Dr. Ray Anderson of the University of Wisconsin-Stevens Point and graduate student Mark Davis were also very actively involved in the stocking and monitoring effort. Davis described the methods used and initial evaluations of the reintroduction effort in his 1978 master's thesis entitled *Reintroduction of the Pine Marten in the Nicolet National Forest, Forest County, Wisconsin* (UW-Stevens Point).

A total of 172 martens (121 males; 51 females) were released into the Nicolet National Forest from 1975 through 1983. Wisconsin DNR forest researcher Bruce Kohn, DNR wildlife manager Ron Eckstein, and DNR forest wildlife research technician Jim Ashbrenner surveyed the marten population in 1983-84 and published the results the following year.

Wildlife Damage

A wildlife damage and abatement program was created in 1983, and wildlife manager Tom Hauge was promoted to become its coordinator. For the first time, the wildlife program had central control of bear, deer, and goose damage assessment, coordinated with funding disbursement. Hauge's innovations eventually streamlined the process into a very structured "Wildlife Damage Abatement and Claims Program" in every county and expanded minor federal involvement into lead agency responsibilities.

Regulations

Hunting and trapping administrative rules and related state statutes continued to be originated by the Bureau of Wildlife Management (my position as Operations Section leader had that responsibility). The Bureau of Law Enforcement continued to provide input and review of draft regulations. However, coordination became more difficult because the enforcement office was on a different floor in the central office.

A law enforcement committee chaired by district warden supervisor Henry Kern developed a new pocket-sized hunting pamphlet in 1974 that combined separate small game, big game, and trapping pamphlets into one 48-page document. Cost factors led to separating the trapping regulation information after 1975, but hunters appreciated the combined pamphlet format for small game and big game. Waterfowl rules are based on federal regulations published too late in the year (September) for such coordination, so its related pamphlet was always published separately.

The time-consuming, mandatory legislative process for establishing regulations prevents very early development of hunting pamphlets and subsequent dissemination to the public. By the time rules were cycled through the system and approved, printing contracts issued, a master copy printed and proofread, and a million copies printed and distributed, it was so late in the year that hunters found it useless for scheduling vacations or planning trips.

I designed and produced a special one-page flyer listing the anticipated opening dates for hunting and trapping in 1978 to help hunters plan ahead and relieve beleaguered DNR public contact personnel who had to answer those questions. A one-page explanation of "Steps to the DNR Rule Process" was another innovation; the flyer was distributed statewide and used as a handout at the statewide Conservation Congress meetings to ensure people knew how the process worked (both flyers were still in use 25 years later).

As the author of all hunting and trapping regulation pamphlets from 1975 to 1989, I learned the hard way that you can't proofread your own writing. While seven wardens assisted in proofreading, somehow I dropped the footnote in 1977 alerting pheasant hunters about the noon season opening. When over one million pamphlets hit the streets, my telephone rang off the hook with irate field wardens angry about the oversight. While news releases notified hunters of the error, I vowed it would never happen again and set up a system that provided final copy to all conservation wardens before publication.

Producing large numbers of hunting regulations cost the wildlife budget a significant amount of money each year. As printing costs increased, the bureau looked at a number of alternatives to reduce this cost. High on the priority list was limiting the number of new regulations—a constant work item each year but difficult considering



Corn damage done by deer.

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the nature of fluctuating game populations. Two formal committee efforts during the decade to reduce rule volume and make them simpler failed to eliminate more than a token number of unneeded regulations.

Significant regulations during the 1969 to 1984 period included the following:

- 1973 – Created the 100-point bag limit for duck hunting
- 1977 – Made it unlawful to place, use, or hunt over any area containing paper, plastic, glass, metal, or wood containers or other nondegradable materials or salt for baiting wildlife
- 1978 – Required a state duck stamp for waterfowl hunting
- 1978 – Required permits for hunting bear with dogs
- 1980 – Replaced deer hunting party permits with Hunter's Choice permits
- 1980 – Required blaze orange for deer hunting clothing color
- 1980 – Restricted shining animals between 10 p.m. and 7 a.m.
- 1983 – Replaced metal deer carcass tags with *Tyvec*
- 1983 – Allowed coyotes to be hunted year-round
- 1983 – Delayed the bear hunting season opening by one week
- 1984 – Created 2 p.m. pheasant season closures and hen shooting areas
- 1984 – Created the Conservation Patron license
- 1984 – Created the turkey stamp requirement for turkey hunting
- 1984 – Legalized group deer hunting (allowed hunters to shoot a deer for any tag holder in their hunting group)

Hunter's Choice permits replaced hunting party permits in 1980.

Tyvec
Durable, tear-proof material used for hunting and trapping licenses and associated backtags.

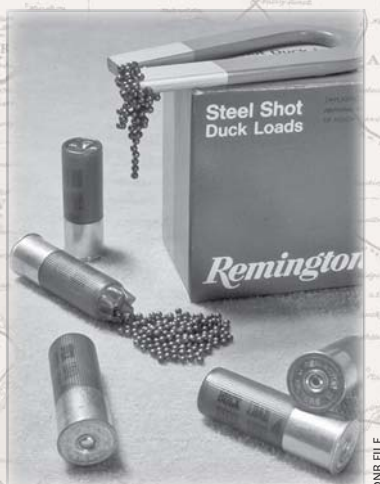
Steel Shot. One of the most significant rule changes in the last 50 years of waterfowl hunting came in the form of a shot pellet restriction. Lead had been used for shot pellets in shotguns since the 1800s. In traditional duck shooting areas, feeding waterfowl often ingested spent lead pellets deposited in the mud bottom of marshes. When the lead in their system reached certain levels, death was imminent.

Tests conducted in 1971 and 1972 by Winchester-Western and Remington Arms brought to a conclusion a series of experiments that sought to establish nontoxic alternatives to lead shot in their ammunition arsenal.

Lead poisoning is hard to detect in the wild. Sick birds usually hide in the vegetation and die without detection. Occasionally, swans (large and white and therefore easy to see) were found dead because of lead poisoning, but the frequency was not alarming, so nothing was done to eliminate the cause through the 1970s.

Controversial from the start, late 1960 and early 1970 experiments by the FWS and ammunition manufacturers assembled as much information as they could on the effects of lead pellets on waterfowl and examined several alternative shot-shell combinations. Tests conducted in 1971 and 1972 by Winchester-Western and Remington Arms brought to a conclusion a series of experiments that sought to establish nontoxic alternatives to lead shot in their ammunition arsenal. Interestingly, Ron Nicklaus (soon to be hired by the Wisconsin DNR) was completing his master's thesis on steel shot at Max McGraw Research Station in Dundee, Illinois, at this same time. Numerous combinations were used by Nicklaus and in most national experiments before steel emerged as a legitimate substitute.

Experiments were also conducted by the FWS at the Patuxent Wildlife Research Center in Maryland including careful scrutiny of shotgun barrel damage resulting from high-volume firing. While it didn't have the killing range of lead, it was faster out of the barrel and very effective in killing ducks and geese inside of 40 yards. Combining this data with the experiments in the private sector eventually cleared the way for steel shot use. The environmental impact statement covering the use of steel for all waterfowl hunting was released in 1974, but it took two years to finalize the document.



The development of nontoxic shot for waterfowl hunting was highly controversial.

During this period, a national campaign was initiated by Ducks Unlimited and the National Wildlife Federation to switch over to steel shot for all waterfowl hunting. Hunters were both surprised and confused by the deluge of new information they had to absorb. Initial reactions from many traditional duck and goose hunters were vehemently against losing lead shot as legitimate shotgun load.

The hunting issues that surfaced were perplexing to the sport. Lead shot killed at longer ranges and was much cheaper than steel. Further, and probably more significantly, steel shot could damage some shotgun barrels, especially older models often used in waterfowling. When steel shot supplies were found to be limited along with shot-size selection, some hunters saw a national plot in the making by shot manufacturers and steel makers to fleece the public.

While the controversy boiled over in Wisconsin and various factions including the Conservation Congress and National Rifle Association chapters spoke out against the use of steel shot, the 1972-73 chair of the Conservation Congress Waterfowl Committee began to voice strong support for it. He became concerned when a goose he shot was discovered to contain a large amount of lead in its gizzard. This person was a quiet-spoken, articulate sportsman named William "Bill" Peterburs from Mequon, Wisconsin.

Bill Murphy did not like a member of his organization speaking contrary to an official position. Rather than making the point privately to Peterburs, Murphy used his usual style of public mockery and demeaning remarks to chastise Peterburs and his position on steel shot. While Peterburs endured this abuse for several weeks, he finally had enough and left the organization. He soon took up similar committee work for the Wisconsin Chapter of the National Wildlife Federation.

Peterburs continued a one-man campaign to eliminate lead poisoning losses in waterfowl. He read every publication on the subject he could get his hands on. He talked to experts all over the country to learn all he could about the disease, research, shot experiments, regulation alternatives, and even hunter attitudes. Convinced that steel shot conversion was the answer to the problem, Peterburs embarked on an aggressive letter writing and public speaking effort that would eventually create a personal identity synonymous with steel shot. In 1978, he was presented with the rarely given Silver Eagle Award by the FWS for his extraordinary effort. Eventually, he was inducted into the Wisconsin Conservation Hall of Fame in large part because of that effort.

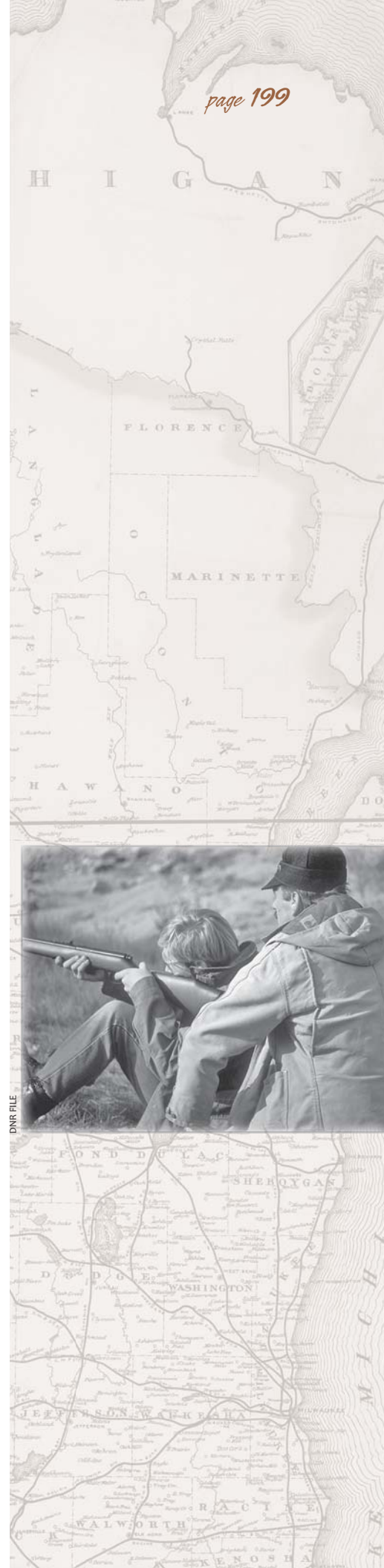
Steel shot became required for waterfowl hunting in select areas in Wisconsin and a few other states in 1977. However, the controversy did not go away. Sportsmen struggled to learn about the new ballistics presented by steel. Handicapped by years of lead use that automatically got their gun barrels too far out in front of the target, they were missing or crippling more ducks and geese with the faster steel. Further, gun damage was still being reported, and the price of steel shot doubled shotshell prices.

Fortunately, as time went on and shot manufacturers created better products, opinions began to change. Firearm design improvements along with improved hunter skills combined to enable broad acceptance of steel shot. Steel shot became required for all waterfowl hunting in Wisconsin in 1987, but wouldn't be required nationwide until 1991.

Wildlife Policy

Throughout the early 1970s, Keener had repeatedly remarked to the staff that a uniform wildlife policy was needed to establish a base of understanding with the Legislature and the public on a variety of major wildlife issues. He thought the policy would help create an improved awareness of important wildlife goals and objectives and therefore would foster improved acceptance of future new programs and rules. Keener discussed the details of his ideas for a wildlife policy at length with Kent Klepinger and Ed Frank around 1975. Ultimately, he gave an assignment to Frank to come up with a draft policy. That was a complex and time-consuming task for one man to accomplish on top of a full workload, but Frank agreed to give it a try.

It took him over a year to produce his initial wildlife policy draft, but it was a good one. At the time, no such document existed in the United States. Many states were talking about it, and the topic appeared for discussion at several national wildlife



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conferences. Frank's first-time effort was truly extraordinary given that there was little guidance for producing such a document and few with the expertise to contribute ideas.

The draft wildlife management policy identified eight objectives of the new policy:

1. Establish long-range management goals and serve as a basis for government agency operational planning and feedback from the Policy Board.
2. Provide a reference for making annual decisions on hunting regulations.
3. Provide a basis for budgetary requests from the department and budgetary decisions by the board.
4. Provide a reference for decision items presented at monthly board meetings.
5. Provide assurance that nongame wildlife objectives and compatible recreational activities are considered in wildlife management program planning.
6. Provide assurance that wildlife management needs and objectives will be considered in the planning and management activities of other functional bureaus (such as Forestry) of the DNR.
7. Serve as a guide for initiating and responding to proposed legislation.
8. Serve as a comprehensive document to assist in defending the overall public interest against pressure from special interest groups.

Field managers, administrators, University of Wisconsin faculty, and key federal and state cooperators through most of 1976 circulated the initial wildlife management policy draft for several months of review. A final draft was presented to the Natural Resources Board for public hearing that October.

The public's response to the proposed policy was very positive. While some understandably didn't know the need for such a document, most environmental organizations, conservation leaders, University of Wisconsin faculty, legislators, and federal cooperators endorsed the policy, expressing a uniform view that it presented a clear picture of Wisconsin's wildlife management goals.

The final administrative rules establishing the Wisconsin wildlife management policy were presented and adopted by the Natural Resources Board in February 1977. Portions of the new policy and topical highlights are presented in Appendix M to illustrate the policy's broad scope.

End of an Era

Toward the end of John Keener's career, he reflected on the wildlife program and its future at the 1982 annual meeting in Eau Claire. Believing that fewer federal dollars would be available and that Pittman-Robertson funds would be reduced or eliminated, he observed that the program would need more innovations and new funding sources and that competition for funds within the agency would be rigorous.

Keener identified eight major issues that would guide future program direction. First, he thought more emphasis should be placed on wildlife management on private lands. Since over 85% of the state was in private ownership, he believed it was very clear that this management direction had tremendous potential for better wildlife program focus. He remarked that the Acres for Wildlife and Project Respect programs "worked around the edges" of private lands management and that "what is needed is a more powerful incentive for that landowner to develop and manage his habitat without economic loss." In Keener's view, a tax incentive was the solution to the problem.

Keener's second concern focused on a need for more management of state wildlife areas and other public lands to achieve multiple benefits. He recognized that past management practices by the agency were primarily aimed at "buy now and develop later" and that single purpose management objectives had to change. John noted that "more properties will undoubtedly be redesignated as recreation areas to emphasize broader multiple benefits. The key here will be to maintain a highest and best use through the master planning process and to constantly update the master plan as new and better user data becomes available."

Third, Keener believed that revenue resources needed to be restructured to emphasize user fees such as wildlife stamps, commercial shooting preserve/game farm fees, hunter fees, and fees paid to private landowners (for access). He observed that “hunters will start to be more selective of the forms of hunting they pursue as well as the places they hunt. Private landowners with the most to offer the hunter will probably charge the user for that commodity.”

To improve hunting quality and ethics relating to major game species and to “maintain supply and demand factors,” Keener’s fourth issue recognized the importance of “meeting demands while protecting supplies” and observed that while controls such as Hunter’s Choice permits, waterfowl regulations, and goose permits were in place to protect the supply, “there is no question but that these will intensify over time.” He noted that regulations affecting hunting quality and ethics (road hunting, hunter number controls, blind spacing, shell limits, etc.) needed to continue. He also observed that in the “near future” more emphasis would be placed on landowner/sportsmen problems and that “wildlife managers will be at the front of this initiative.”

Fifth, Keener pointed out that the database should be “expanded and improved to make better management decisions possible.” This continued improvement would greatly influence wildlife management decisions. Keener termed that movement as “the art progressing toward the science.”

The sixth issue that Keener observed was that wildlife populations would not likely increase and that land use changes would continue to suppress wildlife. He stated that it would take a “major breakthrough in private lands management to turn this tide, especially for pheasants, waterfowl, and other small game.”

Seventh, it would become increasingly common to designate areas on public lands for habitat management for threatened and endangered species, and nongame management would “continue to be primarily the indirect result of other land-use decisions.” Keener noted that a major funding source such as the tax check-off was needed because, although sportsmen had always accepted a “partial responsibility for maintaining a modest level of support for endangered species and nongame programs,” they weren’t likely to be willing pay for more than they presently did.

Finally, Keener stressed that increased emphasis needed to be placed on broad public education on natural resources issues. Keener thought the profession tended to focus on the hunting constituency. He believed this focus must be broadened to include the general public to maintain an informed political base. He cited Dr. Stephen Kellert’s (Yale University) study of North American attitudes toward wildlife management, quoting Kellert’s summary of his findings: “The results revealed a pervasive lack of biological or management knowledge among most segments of the general public. Additionally, while a substantial proportion of the public appeared to possess strong affection and ethical concern for animals, the majority were still characterized by indifference and lack of appreciation.”

Keener ended his presentation by stating that everyone should read the wildlife management policy established in Chapter NR 1 of the Administrative Rules periodically. He noted, “There’s a lot of good insight in this policy. It’s good policy, supported by the board and probably will be, in the last analysis, our guiding light in the future.”

Just before Keener’s retirement in 1984, the deputy director position was eliminated in most bureaus because of austerity, but Keener still had the same number (eight) of staff members that he had in 1969. Ed Frank returned to work full time as the upland game ecologist in 1983. Bureau staff serving at the end of Keener’s tenure and field personnel present in 1984 are shown in Appendix L.

Keener was to retire in November 1984. However, he convinced Secretary Besadny and the division administrator, Jim Huntoon, that hiring his replacement while he was still on the job would benefit the program as well as the new employee. After interviewing five of the top candidates interested in the job, Marinette Area director Steven W. Miller was selected to replace Keener. An old era ended, and a new one was about to begin.

